

ISECON 2005
22nd Annual Information Systems Education
Conference
IS and All That Jazz

Conference Program

October 6-9, 2005

Welcome to **ISECON 2005** in Columbus, Ohio. There is so much to see that you will only have time for a fraction of it. You have choices! These pages include the abstracts for nearly every presentation that is planned, so you can spend your time as carefully as you would like.

Are you looking for your favorite people or schools? Two **indexes** at the end of this document will help you find what you want.

Each event is marked by a **four-digit code**. The first digit identifies the day. 1 = Thu, 2 = Fri, 3 = Sat, 4 = Sun. The second digit identifies the major time block. 21 = Friday morning 8:00 to 9:30. 22 = 10:00 to 12:00. 24 = 3:00 to 5:00. The third digit identifies the room, and the fourth digit specifies the order within that room.

Most papers are grouped by similarity of topic, so you may be able to put down roots and watch several presentations in a row. But we all have many interests, and you may wish to change rooms between presentations, or chat with a colleague in the foyer.

Whatever your choices, have a GREAT conference!

1112 Thu Oct 6, 1:00, in House A
Workshop

Object-Oriented Systems Analysis

Robert V. Stumpf Cal Poly Pomona

The purpose of the workshop is to help the attendee who is familiar with structured systems analysis

make the transition to object-oriented systems analysis in their classes. Student will be given samples of analysis deliverables to use as a guide. There will be three in class exercises given following a brief explanation for each. The deliverables produced are an expanded use case, domain model, and a system sequence diagram with corresponding contracts. The class may be completed using only paper and pencil, however, if student has a laptop with a Microsoft Word compatible word processor, many of the deliverables can be created faster using templates.

1113 Thu Oct 6, 3:15, in House A
Workshop

Object-Oriented Systems Design

Robert V. Stumpf Cal Poly Pomona

The purpose of the workshop is to guide the attendee who is familiar with structured systems design make the transition to object-oriented systems design in their classes. Student will be given samples of design deliverables to use as a guide. There will be three in class exercises given following a brief explanation for each. The deliverables produced are collaborations diagrams, a sequence diagram, and a class diagram. The class may be completed using only paper and pencil, however, if student has a laptop with a Microsoft Word compatible word processor, many of the deliverables can be created faster using templates.

1123 Thu Oct 6, 3:15, in House B
Workshop

Managing Examination Results using CAPP in SunGard's SCT Banner

Roy J. Daigle University of South Alabama

Many universities are acquiring third-party enterprise information systems to manage their complex information needs. These software systems provide a wide range of functionality for managing student-program related needs: course prerequisites, academic history, program definitions, and student degree evaluation. Conceptually, academic programs of study consist of both general and specific course requirements. However, many programs, both undergraduate and graduate, also have non-course requirements such as an exit examinations for undergraduate programs or comprehensive examinations for graduate programs. This paper describes a solution for managing examination results when there is a required level of performance for success on the examination and when there is an upper bound on the number of attempts of the examination. The product used is the Curriculum, Advising and Program Planning (CAPP) module of SunGard's SCT Banner

2112 Fri Oct 7, 8:30, in Governors C
Panel

Show and Tell - Using Interactive Software for Computer Fluency Classes

Margaret Thomas Ohio University
Therese DonGiovanni O'Neil .. Indiana Univ PA
Neelima Bhatnagar . Univ Pittsburgh Johnstown
Jean Upson

A panel of Course Technology's Skills Assessment Management Software software users will discuss their experiences with SAM in different academic settings. Anyone interested in SAM or other web-based training software is encouraged to attend and participate.

2122 Fri Oct 7, 8:30, in Governors D
Refereed Paper

The Center for Computing Education Research (CCER): A Nexus for IS Institutional and Individual Assessment

Lynn J. McKell Brigham Young University
John Reynolds ... Grand Valley State University
Herbert E. Longenecker ... Univ South Alabama
Jeffrey P. Landry University South Alabama
Harold Pardue University of South Alabama

The IS2002 Model Curriculum is a well researched and promoted standard for IS education. Over the past four years a coalition of schools formed to create an assessment exam to be administered to students for measuring performance against objectives of the Model Curriculum. Analysis of examination results provides reports to institutions for curriculum evaluation and development. A Center for Computing Education Research is being formed to manage this process. The ICCP is offering a new professional "Information Systems Analyst" (ISA) certification for students performing at a prescribed level on the assessment exam.

2123 Fri Oct 7, 9:00, in Governors D
Refereed Paper

Using the IS Model Curriculum and CCER Exit Assessment Tools for Course-Level Assessment

Jeffrey Landry University of South Alabama
Harold Pardue University of South Alabama
Herbert Longenecker . University South Alabama
John Reynolds ... Grand Valley State University
Lynn McKell Brigham Young University
Bruce White Quinnipiac University

The paper describes a process whereby IS faculty work collaboratively in a community-of-practice (Pardue et al. 2005) in order to assess and improve student educational performance at the course-level. Working with colleagues and utilizing resources of the Center for Computing Education Research

(www.iseducation.org) and the Institute for the Certification of Computing Professionals (ICCP), and utilizing the IS 2002 Model Curriculum, faculty can development and administer online assessment exams. Each of these exams is designed for courses they teach and is given to students for placement, pre-test, and post-test purposes.

2124 Fri Oct 7, 9:30, in Governors D
Refereed Paper

Information Systems Curriculum Revision in a Hostile Environment: Declining Interest, Threats from Offshore, and Proprietary Certification

W. Brett McKenzie .. Roger Williams University

The paradox of increased computer use in society and declining interest in computing among United States undergraduates requires addressing. As currently configured, Information Systems programs no longer seem to attract the students needed to sustain the economy or the major. In this environment, the CIS department revised its curriculum to improve interest and more clearly integrate IS offerings with student career goals. This paper focuses primarily on a redesigned core to increase access to the discipline. Additionally, it provides an overview of the new curriculum that encourages integration with other disciplines, such as Criminal Justice and Graphic Design, which are changing due to the increase in digital interaction and representation. Initial reaction, indicated by student selection, indicates that the revised curriculum may answer the threats to the major.

2132 Fri Oct 7, 8:30, in Governors E
Refereed Paper

The Role of Hybrid Learning Nets in Executive Management Education

Owen P. Hall, Jr Pepperdine University
Thomas J. Dudley Pepperdine University

Business schools have been experiencing a number of challenges over the past several years including

declining enrollments. One of the few bright spots in this mosaic has been an increase in demand for executive management education. This trend can be attributed, in part, to globalization and to continued technological developments. These dynamics call for new and innovative systems for improving the delivery of executive management education. The traditional pedagogy is being replaced by a combination of time-honored and web-based customized learning systems. These so-called hybrid learning nets (HLN) are designed to optimize the learning experience. Equally important, HLN help enhance the overall business curriculum by improving course integration and consistency. HLN offer extensive opportunities for collaborative learning that often positively impact the educational experience. An essential feature of HLN is feedback. HLN can deliver specific content based on the background a...

2133 Fri Oct 7, 9:00, in Governors E
Refereed Paper

Using Alice in a Computer Science Survey Course

Jill Courte Miami University
Elizabeth V. Howard Miami University
Cathy Bishop-Clark Miami University

Students in an introductory computer science survey course for non-majors used the 3-D interactive programming environment Alice for their programming module. With Alice, students create animated worlds using a variety of objects and easily accessed programming constructs. Alice has previously been used successfully to provide a gentle introduction to computer programming in a fun and enjoyable way, and has been shown to increase retention in computer programming courses. However, use of Alice appears to be limited as there is little to be found in the literature regarding its use in information technology courses. This lack of data prompted a study to determine if Alice is a suitable tool to introduce computer programming to non-majors in a friendly and inclusive way. This paper reports on the use of Alice with approximately 100 students enrolled in a non-majors computer science course. Students were surveyed about their attitudes toward computer programming before and after ...

2134 Fri Oct 7, 9:30, in Governors E
Refereed Paper

Wearing Software Hats: Teaching Introductory Technology through Software Interactions

Mark Frydenberg Bentley College

Students use computer software to accomplish many tasks that are part of their daily routines. This paper describes an innovative approach to teaching an introductory technology course in which students who had some previous experience expanded their knowledge by interacting with different types of software applications, and by analyzing their roles in relationship to those applications. Students purchased Pocket PCs to use along with their laptops for this course; no printed text books were used. This active-learning approach enabled students to learn the traditional course topics in a way that made them relevant and engaging. Additional benefits included students creatively using their Pocket PCs for both personal and educational purposes, allowing them to apply the technologies they learned in the classroom to the contexts of their own lives.

2142 Fri Oct 7, 8:30, in Senate A
Refereed Paper

A New Measure to Analyze Student Performance Using the Likert Scale

William J. Tastle Ithaca College
Jack Russell Northwestern State University
Mark J. Wierman Creighton University

Likert scale measures are commonly used in assessing student performance as well as student perceptions. They are particularly good in gathering data to subjective questions, but being able to compare and contrast multiple Likert data has been a challenge for the typical academic. Researchers and educators alike frequently assign a numerical value to each Likert category, and then take a weighted average to get some general overall value that can be used for comparative purposes. Such efforts are fraught with error, since Likert scales are ordinal measures. A new measure is presented here and discussed, and

an example of its use is provided. The new measure is called the Consensus Measure; when used in conjunction with a weighted mean it is easy to intuitively grasp the dispersion of values around any mean. Ranking sets of Likert scale data is easily accomplished and philosophically established.

2143 Fri Oct 7, 9:00, in Senate A
Refereed Paper

Global Media: Incorporating Videocams and Blogs in a Global IS Management Class

Catherine M. Beise Salisbury University

This paper reports on the results and lessons learned from a pilot project to incorporate blogs and desktop video into a course on Global IS Management. The main purpose of the project was for students to have a simulated experience of working together on distributed, or "virtual," global teams. The paper discusses the pedagogical goals of the class and how the two technologies were intended to support those goals. It provides brief overviews of the technologies, and then discusses the outcomes of incorporating them into the class. Blogs are web logs that can serve as on-line learning journals, and as vehicles for student reflection as well as interaction. The blogs did not engage the students as much as expected, perhaps because they used free blog sites and were hesitant to post their thoughts for the entire world to see. The students incorporated remotely located team members via video into team presentations to their classmates. They encountered some technical challenges...

2144 Fri Oct 7, 9:30, in Senate A
Refereed Paper

Programming is Not Dead

Kurt Jordan Calumet College of St. Joseph

Events over the last few years, with the advent of outsourcing and offshoring, have generated many articles, news stories and prophecies about the end of the programming profession here in the United

States. Recent research, however, tells a different story. This paper details some of that research that shows demand for application development skills is still alive and well in the States and will be for some time to come.

2152 Fri Oct 7, 8:30, in Senate B
Refereed Paper

Declining CIS Enrollment: An Examination of Pre-College Factors

William L. Lomerson .. Northwestern State Univ
Lissa F. Pollacia Northwestern State Univ

Anecdotal and direct enrollment evidence indicates there is a declining interest in Computer Information Systems (CIS) as a major. We believe one of the significant contributors to this decline is the lack of availability of accurate information about this area to high school students when they are making choices about future careers and appropriate colleges. We tested this proposition by surveying freshmen in our introductory computers course to determine their differential knowledge of the various computer career fields. In addition, we collected data concerning the information that a student used to select a college, select a major, their initial college major and the source of that information. The results of this survey provide initial guidance on some remediation activities that CIS programs may undertake to increase the number of students pursuing a CIS major.

2153 Fri Oct 7, 9:00, in Senate B
Refereed Paper

A Study of Software Methodology Analysis: "Great Taste or Less Filling"

Jeffrey L. Brewer Purdue University
Kevin Dittman Purdue University
Gaurav Ghatge Purdue University

Software project management methodologies that have developed in the past couple of decades have done so to address the endemic problem of software project failures caused, in a large part, by lack of

planning and poor execution. Methodologies like Waterfall, Sashimi, Spiral and Agile have all become key tools in a project manager's tool box. With so many methodologies littering the software development domain, it begs the question as to which development methodology is the right one for a particular project. How does a project manager know which methodology available today is the right one to produce satisfactory results? In this paper we address these questions and also how to aid students in their understanding of these choices.

2162 Fri Oct 7, 8:30, in House A
Refereed Paper

Incorporating ERP into MIS Curriculum: Some Insights

Ken Surendran .. Southeast Missouri State Univ
C. Raj' Somarajan .. Southeast Missouri St Univ
Darby Holsing University of South Dakota

Successful Enterprise Resource Planning (ERP) integration in curricula is achieved by creating and maintaining the system infrastructure, motivating and mobilizing faculty resources, identifying course material to suit curricular requirements, developing matching case studies, and facilitating student learning through discussions and hands-on activities. The three authors collectively have direct experience, albeit gathered at different times and under varied circumstances, in addressing these issues with regards to the ERP system SAP R/3. By organizing these issues under three major categories, the authors present a cohesive theme for successful SAP R/3 integration into undergraduate MIS and business curricula.

2163 Fri Oct 7, 9:00, in House A
Refereed Paper

Skills Learnt During a Systems Development Course: Graduate Perceptions of Skills Transfer and Industry Alignment

Lisa Seymour University of Cape Town
Elsje Scott University of Cape Town

Spiros Malamoglou University of Cape Town
Joel Meyerowitz University of Cape Town
Anita Morar University of Cape Town

There is currently much debate on the adequacy of Information Systems courses in preparing students for systems development work. To address this need, this paper's purpose was to determine whether the skills that students learnt during a systems development course were applied in the workplace. The investigation was performed during 2004 from students who had attended the third year systems development course at the University of Cape Town during 2000 to 2003. This course has as its outcomes various technical, interpersonal and business skills. The research approach adopted was to determine graduate's usage and importance rating of these skills in the workplace, satisfaction of industry representatives with student skills as well as the extent to which graduates felt these skills had been learnt during the systems development course. Quantitative analysis of questionnaires completed by graduates and evaluation forms completed by industry representatives was performed. The res...

2164 Fri Oct 7, 9:30, in House A
 Refereed Paper

Whither IS? Issues and Problems in Classifying CC2005 Programs Using CIP Codes

Paul M. Leidig ... Grand Valley State University
George S. Nezelek Grand Valley State Univ
John H. Reynolds Grand Valley State Univ

This paper considers a process to categorize computing programs, and its specific application to Information Systems programs. Information Systems is an inherently inter-disciplinary field. The essentially haphazard proliferation of programs has effectively created a broad but ill-defined discipline that often crosses boundaries between mathematics, science, engineering, and business. The authors propose to categorize programs specified in CC 2005 by incorporating the NCES Classification of Instructional Programs (CIP) codes. While there is currently no direct correlation between CC 2005 and CIP codes, an appropriate classification scheme is highly desirable

for teachers, administrators, students, and prospective employers trying to make sense of the wide range of program offerings.

2172 Fri Oct 7, 8:30, in House B
 Refereed Paper

Does Information Systems (IS) Really Matter in Business Colleges?

David S. McDonald Georgia State University
Therese Viscelli Georgia State University

This paper uses a survey of over 330 colleges of business to examine: 1) Whether an Information Systems core course is employed by the college? 2) What content this required course contains? 3) How many colleges are now requiring students to take a basic computer literacy course prior to taking any of the core sequence? From these three key questions, other related questions were posed for the survey.

2173 Fri Oct 7, 9:00, in House B
 Refereed Paper

Teaching Systems Analysis and Design as a Writing-Intensive Course

James J. Pomykalski ... Susquehanna University

Writing and critical thinking skills are paramount to the future success of Information Systems professionals. The Systems Analysis and Design course affords the opportunity to practice writing and thinking skills by interleaving assignments that include a significant writing component. Each Information Systems student must be able to communicate their technical work to business professionals who act as clients, end-users, and stakeholders in the development work. In this paper, the development of the Systems Analysis and Design course into writing assignments to meet the needs of students and be considered, by the University, as a writing-intensive course is described.

2312 Fri Oct 7, 10:30, in Governors C
 Refereed Paper

Is this Course Right for You? Using Self-Tests for Students' Placement

Lucia Dettori DePaul University
Theresa Steinbach DePaul University
Martin Kalin DePaul University

Key to student success in introductory Information Technology and Computer Science courses is the adequate mastery of prerequisite concepts. One method utilized to ensure the proper placement of students in these first courses is through self-administered computerized assessment tests. These tests were introduced as a result of a major restructuring of the undergraduate curriculum at the authors' school, the establishment of a prerequisite-light introductory sequence, the wide range of skill sets of entering freshmen, the high number of transfer students from community colleges, and the use of these courses by several graduate degrees in their prerequisite phase. Six tests have been created to test fundamental programming concepts, database manipulation and design, data analysis and development methodologies. Advisors encourage the use of these tests for initial placement. Some students have long gaps between the first and second courses in a sequence and can assess their retention...

2313 Fri Oct 7, 11:00, in Governors C
 Refereed Paper

Vendor/Industry Certifications and a College Degree: A Proposed Concentration for Network Infrastructure

Garry L. White . Texas State Univ – San Marcos

This paper proposes a network infrastructure 4-year degree curriculum based on industry/vendor certifications. The author argues that such a curriculum will meet industry standards and needs. And the academic department will have a valid method of assessment. An employer will be provided high caliber entry level candidates. And the college degreed student wins since he/she will be more job marketable for entry level technical positions, plus have the potential to be promoted to management level positions.

2314 Fri Oct 7, 11:30, in Governors C
 Refereed Paper

Using a “Real” Systems Development Project to Enrich a Systems Analysis and Design Course

Janet Helwig Dominican University

Without a real problem to solve, a Systems Analysis and Design course typically covers systems development from a theoretical perspective, and emphasizes how to develop graphical models (e.g., use case diagrams, data flow diagrams, ERD's, and UML diagrams) to document requirements and design. However, this course can provide a richer and more meaningful learning experience for students by providing them the opportunity to work as a team to build a real system for real users and thereby experience the “systems development process” – gathering and documenting requirements, designing, building, testing, and deploying. With semester time constraints, though, even a small project may prove unwieldy. Using an architected, rapid application development (ARAD) tool to speed development can help by delivering a well-engineered application architecture and generating much of the needed code. This paper explores the author's experience teaching this course with a systems development proje...

2322 Fri Oct 7, 10:30, in Governors D
 Refereed Paper

Extending the Consensus Measure: Analyzing Ordinal Data With Respect to Extrema

Jennifer M. Tastle Ithaca College
William J. Tastle Ithaca College

The existence of an ordinal measure already exists and is well justified, but a modest extension of the consensus formula permits Likert scale data to be assessed with respect to a predetermined extreme value, and the results used for comparisons and trajectories. The new measure, called the strength of consensus measure, is a modification of both the Shannon entropy, an equation common to the foundation of information theory, and the standard consensus measure.

2323 Fri Oct 7, 11:00, in Governors D
Refereed Paper

Importance of Learner-Learner Interaction in Distance Education

Jason H. Sharp Tarleton State University
Jason B. Huett University of North Texas

The purpose of this paper is to draw conclusions regarding the importance of learner-learner interaction when compared to learner-content and learner-instructor interaction in distance education. The paper examines current research concerning whether one type of interaction is more important than the other types. It briefly reviews the types of interaction that have been proposed for use in distance education, the importance of designing interaction into distance learning environments, and the frameworks suggested for effective facilitation of interaction. While current research may not be able to ascertain which type of interaction is most important to students in distance education, it is the authors' contention that, until research can further clarify the issue, the quality of distance education should improve with renewed focus on incorporating learner-learner interaction.

2324 Fri Oct 7, 11:30, in Governors D
Refereed Paper

The Use of Open Source Software in Education

Jason H. Sharp Tarleton State University
Jason B. Huett University of North Texas

This paper reviews the current literature regarding the use of Open Source software in education. The material is presented in thematic order and includes a brief history of the Open Source movement and provides a general definition and philosophy of the movement. Several key areas are covered including the strengths and limitations of Open Source software, its diffusion into education, and research on its actual use in educational settings. The review concludes by providing possible ideas for the development of Open Source software and raises questions for future research.

2332 Fri Oct 7, 10:30, in Governors E
Refereed Paper

Metaphors, Polymorphism, Domain Analysis and Reuse: Teaching Modeling in the Object-Oriented Paradigm

Leslie J. Waguespack, Jr Bentley College

Object-oriented programming has become a mainstay of computing curricula over the last decade. Although its industrial promise for improving productivity, particularly by way of enabling extensive reuse, has propelled it to an essential status, it is usually taught in a vacuum of little or no effective modeling theory or practice. In this paper we argue that this vacuum robs most students of their potential to both understand or professionally profit from the complex mass of syntax and class library detail in which they are drowned in most OO development courses. The paper reviews OO-based reuse, the current state of modeling in IS2002 national curriculum and contemporary systems analysis texts, the underlying behavior and metaphor-driven principles of domain modeling and a framework for recovering the reuse benefits of the OO paradigm in IS education.

2333 Fri Oct 7, 11:00, in Governors E
Refereed Paper

The Information Technology Model Curriculum

Eydie Lawson ... Rochester Institute Technology
Han Reichgelt Georgia Southern University
Barry Lunt Brigham Young University
Joseph J. Ekstrom ... Brigham Young University
Reza Kamali Purdue University Calumet
Jacob Miller ... Pennsylvania College Technology
Sandra Gorka . Pennsylvania College Technology

The last twenty years has seen the development of demand for a new type of computing professional, which has resulted in the emergence of the academic discipline of Information Technology (IT). Numerous colleges and universities across the country and abroad have responded by developing programs without the advantage of an existing model

for guidance. Efforts to define a model curriculum for IT began at the first Conference on Information Technology curriculum (CITC-1) in December 2001, which included representatives from 15 IT programs at four-year universities across the United States. Membership in SIGITE (Special Interest Group Information Technology Education) has grown to over 300 representing most of the four-year IT programs in the United States and abroad and many of the two-year IT programs in the United States. Continued development of the curriculum and subsequent funding by the Education Board of ACM enabled the completion of a first draft of the model curriculum fo...

2334 Fri Oct 7, 11:30, in Governors E
Refereed Paper

Business Geographic Information Systems - A Course in Business Geomapping

Steve Reames Angelo State University

This paper discusses the importance of Geographic Information Systems (GIS) in the business curriculum. During the Summer II, 2004 term, work began on the development of a course in geomapping fundamentals. The course was made possible with an internal technology development grant at Angelo State University (ASU). The proposal was to develop a new geomapping course at ASU that would blend both business management and marketing courses to enhance current theorems taught in each curriculum. The course would be of special interest to students majoring in managing information systems, computer science, physics, mathematics, education, management, marketing, and agriculture.

2342 Fri Oct 7, 10:30, in Senate A
Refereed Paper

Group Projects in In-ground Undergraduate and On-Line Graduate Degree Programs: Guidelines for Success

Kathleen Kelm Edgewood College

Gail Miles Lenoir-Rhyne College

Professional organizations and employers continue to recommend the use of team based projects for undergraduate and graduate degree programs in Information Systems and Technology. The delivery model of in-ground and on-line degree programs are different in terms of physical versus virtual space. Yet, the use of group projects reveals similarities in challenges in both paradigms. Effective teamwork requires collaborative work space, accountability for contributions, and effective time management. This paper discusses how these are integrated in both in-ground undergraduate programs and on-line graduate programs, in particular, in courses that produce software programs and research papers. Recommendations for best practices are included at the end of the discussion.

2343 Fri Oct 7, 11:00, in Senate A
Refereed Paper

An Alternative Testing Strategy for Advanced Programming Courses

Wendy Ceccucci Quinnipiac University

The traditional methodologies for evaluating student learning have been either a hand-written exam, usually in the form of multiple choice questions, or a take home program. These methods both have limitations which make it difficult to accurately measure a student's ability to apply the material learned to design and develop a program. An alternative testing strategy would be to let each student develop a take-home program exam for another student in the class. This evaluation strategy would allow students to uniquely apply the material learned. While developing their own programs, students would gain a better perspective of the limitations of their current knowledge.

2344 Fri Oct 7, 11:30, in Senate A
Refereed Paper

What Do Students Know When They Enter College?

Wendy Ceccucci Quinnipiac University

The purpose of this research is to determine the current courses students are being offered in secondary education to prepare a model curriculum for higher education. This research evaluates a sampling of high schools to determine what computer classes students are required to attend and what electives are now available. Topics researched included application courses, programming courses, web or e-commerce courses, hardware and networking courses, and graphics and desktop publishing courses. Classes were evaluated based upon offerings as well as content.

2352 Fri Oct 7, 10:30, in Senate B
Refereed Paper

Utilizing Snyder's "Fluency With Information Technology" In An Undergraduate "Introduction To Information Systems" Class

Marc Waldman Manhattan College
Mehmet Ulema Manhattan College

This paper describes the authors' experience using Snyder's "Fluency with Information Technology" textbook in an undergraduate Introduction to Information Systems course. Unlike many traditional Information Systems textbooks, Snyder's book is focused solely on Information Technology. Topics covered in this paper include our justification for using Snyder's textbook, strengths and weaknesses of the textbook for an IS course, and the implementation and replacement of the textbook's student lab exercises.

2353 Fri Oct 7, 11:00, in Senate B
Refereed Paper

Tips for Improving Writing in IS/IT Courses

William Owen University of South Alabama
William Young University of South Alabama

This paper reviews the importance of clear writing for Information Systems and Information Technology (IS/IT) professionals. The need for effective written communication is emphasized by professional organizations, university standards, and industry needs. Incorporating writing into content-heavy courses appears as a daunting task for the busy professor. This paper offers tips that will help when including writing activities in IS/IT courses. The tips focus on integrating writing and content as well as streamlining the logistics of incorporating writing in a course.

2354 Fri Oct 7, 11:30, in Senate B
Refereed Paper

Student Reactions to Online Course Delivery – a Contrast Between Fulltime and Part-time Students

Kenneth A. Grant Ryerson University
Franklyn Prescod Ryerson University
Herman Ho Ryerson University

Evaluation of the delivery of the same course in a distance format to two differing classes of students, one of fulltime degree students, the other of part time students in a variety of programs, produced strong support for the delivery method. While concerns have been raised about the suitability of distance delivery techniques for younger, less mature students and about different learning styles, this comparison found few significant differences between the participation, performance and satisfaction of such students when compared to a more mature group of part-time students for whom distance education was the method of choice. Further, both groups rated the experience equal or superior to conventional in-class delivery.

2362 Fri Oct 7, 10:30, in House A
Refereed Paper

Robust Software Development: A Technical Approach Using the Rational Unified Process

Robert F. Roggio University of North Florida

Most computer science (CS) and computer information sciences (CIS) programs require one or more courses in software development. Within computer science programs, the courses are normally entitled software engineering or senior design project, whereas within CIS programs, software development is often called Systems Analysis and Design and is (more often than in CS programs) a two course sequence. Often considered a capstone sequence, there is a wide range of instructional approaches. In many cases the chosen approach is derived from the academic unit within which the CIS program is offered. Schools of Business, Schools of Arts and Sciences, or Schools of Engineering often approach the sequence differently. This paper presents a comprehensive approach to teaching a two-course software development sequence in a CIS program taught within a College of Computing, Engineering, and Construction. The sequence contains a modest treatment of business concepts coupled with heavy emphases...

2363 Fri Oct 7, 11:00, in House A
Refereed Paper

Teaching Systems Analysis and Design: Bringing the Real World into Classroom

Brady Chen Fitchburg State College

The Systems Analysis and Design (SA&D) and Systems Design and Implementations (SD&I) are two capstone courses for students in the major of computer information systems in the department of computer science at Fitchburg State College (FSC). These two courses cover a core set of skills that students need to learn to develop systems. Along with the materials covered in the courses, there is a running project, sometimes called a case. Most likely, the running project is simulated one and the data is made up. Students who take the courses are supposed to get training in the design and implementations of a system. The author has been teaching SA&D and SD&I for three consecutive years at the computer science department in FSC. In the first two years, the courses were taught with traditional approach, i.e. teaching the courses with simulated project. Last year, a new approach was tried. It combined the classroom teaching with a real project from the FSC IT department. In this paper, the

au...

2364 Fri Oct 7, 11:30, in House A
Refereed Paper

Coping with Offshore Outsourcing and Enhancing Student Retention

Rathika Rajaravivarma .. Central Connecticut St
Ken Surendran .. Southeast Missouri State Univ

The present enrollment reduction in CS, CIS and MIS programs may not be due to just a dip in the business cycle. Apart from the lack of recovery from the internet investment bubble-burst, the continued migration of entry-level system development jobs due to offshore outsourcing, could be a contributor to this reduction in enrollment. In addition to reduced enrollment, student retention in these programs seems to be another issue that needs to be examined. However, at the same time, there appears to be a steady demand for higher-level IT professionals and IT literate professionals in other disciplines. Since the CS, CIS, and MIS graduates are developed, from employment point of view, to assume entry-level jobs in the IT field, there seems to be a mismatch between the skills industries require and the skills with which these programs prepare the students. In this paper, the authors have compiled a few strategies academia could consider for addressing these issues. Some of these st...

2512 Fri Oct 7, 2:30, in Governors C
Panel

Knowledge Cafe, The IT Educator's Paradox

Kenneth A. Grant Ryerson University

After some 10-15 years of well above average growth and pretty positive job perception, IT work has lost its attractiveness. Undoubtedly strongly influenced by the recent recession and the dot.com bubble, the field has seen layoffs, reduced salary increases and external threats, such as offshoring. Possibly as a result of this, enrolment in IT-related programs at college and university has seen a significant decline,

in some cases threatening faculty jobs and even program existence. Yet, labor market analysis and projections for the next decade for both the US and Canada suggest that IT job growth will continue to be well above the average employment growth in each country. So what are the reasons for this apparent paradox and what can be done to resolve it? Projections say the jobs will be there, yet many students are not buying in. Are the projections correct? Are there other market dynamics we have not addressed? What kind of jobs will be in demand? Needing what skills?...

2522 Fri Oct 7, 2:30, in Governors D
Refereed Paper

Designing a Software Application to Implement the Provisions of a New Tax Regulation: A Collaborative Project for CIS and Taxation Students

Janet Helwig Dominican University
Steve Harrington Dominican University
Anne Drougas Dominican University

To establish greater collaboration between faculty members in the computer information systems (CIS) and accounting disciplines, and to enhance student appreciation for the integrated nature of the disciplines, an assignment is designed that allows a student from a systems analysis and design course to partner with a student from an introductory federal income taxation course. After retrieving Internal Revenue Service (IRS) Publication 600 (available at <http://www.irs.gov/pub/irs-pdf/p600.pdf>) from the IRS website, student teams are expected to design and implement a software application to incorporate the language, worksheet, and tables included within the publication. Test data is supplied to help student teams determine the success of their programming efforts. Links to sample C++ and VB.Net program solutions are also provided.

2523 Fri Oct 7, 3:00, in Governors D
Refereed Paper

Nine Principles for Designing a Study Program

Stefan Cronholm Linkping University

This paper outlines nine key principles to consider when designing a study program. Design principles are essential when revising education programs in the field of information systems due to the rapid changes in business technique. These principles are generated from an empirical study concerning the development of a modified study program. The principles identified are: Vision; Traceability; Progression and Integration; Manning the development project and anchoring decisions; Pedagogy; Mandatory vs. free choice of courses; Implementation; Evaluation and Marketing. These are compared to a list of criteria generated by the Swedish National Agency for Higher Education and the outcome of this comparison is that several of the principles can also be used for the evaluation of study programs. The research has been carried out as action research. This means that there has been an intervention in the process of the designing the study program. The target groups of this paper are study b...

2524 Fri Oct 7, 3:30, in Governors D
Refereed Paper

Simulated Machine (Assembler): Learn the Anatomy – Then Move to the Tools

William G. Verbrugge Cal Poly Pomona

Integrated Development Environments are excellent production tools for intermediate and advanced programming students and even beginners after they have learned the concepts of stored data, computer instructions, and the anatomy of the computer. There is a need for an assembler language that is simple and straightforward for the beginning student to understand. Most authors of introduction to programming books recognize this by their inclusion of one to twenty pages on this topic. This paper presents how using a simulated assembler with a simple assembly language can introduce the beginning student to the concepts of stored programs, core storage, the difference between instructions and data, the ability to modify a set of instructions, etc. without having to be concerned with all the exceptions and rigor of a full assembler language. The

Simulated Assembler and the easy procedures for using it in a first programming course are provided. Students studying Computer Information ...

2525 Fri Oct 7, 4:00, in Governors D
Refereed Paper

Teaching Programming Classes Using Net Support School

Claude Simpson University Texas Pan American
Michael Crews .. University Texas Pan American
Les Rydl University of Texas Pan American
Joe Roge' University of Texas Pan American

Frustrated by students surfing the web, typing, chatting, and other activities that prevent them from paying attention to what is going on in class? If you answered this question YES then we have the potential answer for you—Net Support School (NSS). Net Support School is a software program that connects computers on a network as a class. A tutor station and client stations can participate in the class. The tutor station has the ability to project his/her screen to the class, scan student stations (view what they are working on), solving student programming problems and showing to other students, distributing files and a host of other very useful activities. All of this is done with software; no hardware other than what it takes to connect to a network; it is also cheap.

2532 Fri Oct 7, 2:30, in Governors E
Refereed Paper

The Effective Use of Web-Based Training and Assessment in a Computer Literacy Course

Therese DonGiovanni O'Neil .. Indiana Univ PA

With the onset of the millennium comes the diversity of students' knowledge in the field of computer literacy. High schools are now graduating a more computer literate student. This poses a challenge to the basic computer literacy course instructor. How to meet the needs of all students is a common quandary. It has been my experience as

an educator that the answer lies in the implementation of a web-based training and assessment software package. Fifty percent of our course in computer literacy delves into computer concepts. This author does not endorse web-based training and assessment in that area. When discussing computer ethics or cybercrimes, for example, the traditional classroom is a much better venue to entice student interaction and critical thinking. This paper will explain how using training and assessment software in the computer applications portion of the course will effectively meet the needs of the non-traditional student as well as the traditional student. ...

2533 Fri Oct 7, 3:00, in Governors E
Refereed Paper

Running Legacy COBOL Programs by Proxy with COBOL.NET

John D. Haney Northern Arizona University

Microsoft's .NET Integrated Development Environment (IDE) provides a process where old legacy COBOL programs can appear as if they were written in a contemporary language such as C#. This is accomplished within the .NET environment by creating a solution that consists of two projects. The first contains the C# program with the graphical user interface. The second contains the legacy program and a COBOL proxy program that provides the link between the C# program and the legacy program. A COBOL data object class supplies the mechanism for the transference of data between the proxy program and the C# program. By the use of this process only slight modifications to the legacy program are necessary to run a legacy COBOL program by proxy. This project would most appropriately be integrated in an advanced programming course.

2534 Fri Oct 7, 3:30, in Governors E
Refereed Paper

Model Driven Architecture: A Research Review for Information Systems Educators Teaching Software Development

Samuel S. Conn Regis University

Lynne Forrester University of Denver

The increasing complexity of business systems, the accelerating pace of technological change, and the highly competitive business environment are overwhelming software development methodologies that have stayed essentially the same for the last fifty years. Model Driven Architecture (MDA) is a current initiative by the Object Management Group that represents a major evolution in the way software is developed. There is growing consensus by the information systems community on the fundamental principals of MDA, but some critical elements are missing in the areas of transformation and system-behavior modeling. Agreement on standards and approaches in these areas will take some time, and substantial work remains before MDA can replace traditional, long-practiced methods and be considered a routine approach to software development. When this happens it has the potential to significantly improve the integration of customers into the software development lifecycle. Traditional develop...

2535 Fri Oct 7, 4:00, in Governors E
Refereed Paper

Profitability of Outsourcing Information Technology

Mehmet C. Kocaklh Univ Southern Indiana
Teena A. Holzmeyer Univ Southern Indiana
Marvin Albin University of Southern Indiana

Outsourcing has become big business and a practice that is part of the standard operating procedures of most organizations. How does a firm decide to outsource and what to outsource? This paper reviews the benefits of outsourcing which include not only cost savings but more time for managers to devote to Customer Resource Management among other areas. Disadvantages of outsourcing include loss of control and several other factors. Profitable outsourcing includes 17 essential factors pertinent to reducing the risk of outsourcing: Identify the Objectives, Assess the Reasons for Outsourcing, Address Key Issues, Use a Systematic Method to Analyze Decisions, Consider All Stakeholders, Perform a Benchmark, Create a Sound Request for Proposal (RFP), Identify Responsible Parties, Understand the Out-

sourcer and Its Service, Recognize That Outsourcing Is Not All Or Nothing, Establish an Adaptable Relationship with the Vendor, Negotiate a Sound Contract, Implement Performance Incentives an...

2542 Fri Oct 7, 2:30, in Senate A
Refereed Paper

Using the Software Development Life Cycle as a Curriculum Design Tool in the Development of a “Companion Course” for Beginning Programmers

Ronald J. Harkins Miami University

The software development lifecycle method has been used widely by software engineers to produce reliable, efficient, and user-friendly software. The lifecycle process solves problems utilizing technology in six distinct steps: Problem Specification, Problem Analysis, Solution Design, Solution Implementation (coding), Solution Testing, and Solution Maintenance. Computer science educators, likewise, have used the lifecycle methodology to promote logical, efficient problem solving, and disciplined programming behaviors in their students. This same six step lifecycle process can be used effectively in solving curricular problems encountered by computer science departments. Specifically, this paper will detail how the lifecycle method was used in solving the problem of helping frustrated, anxious, and unsuccessful students in the early weeks of a first course in computer programming by developing a short, targeted, programming concepts “companion course” for these students. The ensu...

2543 Fri Oct 7, 3:00, in Senate A
Refereed Paper

A Case for Personal Knowledge Management in the Information Systems Curriculum

Alan T. Burns DePaul University
Thomas N. Janicki Univ N Carolina Wilmington

One of the goals of the MSIS (Master of Science in Information Systems) 2006 curriculum model is to

prepare students for workplace realities upon graduation. The IT workforce of the future will be comprised of knowledge workers who must be capable of managing multiple and diverse information streams to enhance their knowledge. This paper argues that Personal Knowledge Management (PKM) tools and techniques should be incorporated into the graduate IS program. The three primary benefits are a) better preparation of students for IT work, b) more effective employees for the IT field, and c) a more effective learning experience for students.

2544 Fri Oct 7, 3:30, in Senate A
Refereed Paper

Practical Aspects of Promoting Research in a Graduate Course

Behrooz Seyed-Abbasi Univ North Florida

The introduction and reinforcement of skills related to communication and research are vital components that need to be incorporated into the course structure of undergraduate and graduate programs related to computer technology. Practical utilization of these skills is essential for students to develop their critical thinking proficiency, to understand how to assess a particular domain, to enhance decision making expertise, and to share their work through written documentation and verbal communication. However, this incorporation often presents a challenge since the emphasis in many computer and information systems/science courses is frequently focused on implementation proficiency. An approach that provides an opportunity for students within a topic-oriented class setting to learn the basics of research, while at the same time develop oral and written communication skills through presentations and documentation of a research project is presented. The overall methodology has t...

2545 Fri Oct 7, 4:00, in Senate A
Refereed Paper

Implementing Industry Certification in an IS curriculum: an Australian Experience

Robert Jovanovic Victoria University

John Bentley Victoria University
Andrew Stein Victoria University
Con Nikakis Victoria University

Over a period of 40 years, the Information Systems (IS) discipline has become an essential component in the employment of information technology personnel in business and government organisations. In recent times there have been discussions by IS professionals on how to best respond to developments in the information technology and communications industry. At the same time there has been a downturn in employment opportunities in this industry (ICT Skills Snapshot, 2004). Recent research also indicates that many of the entry-level positions that graduates traditionally entered have diminished due to the economic downturn and to companies outsourcing positions to off-shore companies. This “in-progress” paper presents the path that one Australian University school took in introducing multiple certification programs in an endeavour to better connect a university school with ICT industry requirements. The certification programs include SAP, ITIL, I-Net+ and Microsoft accredited pro...

2552 Fri Oct 7, 2:30, in Senate B
Refereed Paper

The Effects of Search Costs on Prices and Price Dispersion: A Web-based Classroom Game

James R. Wolf Ohio State University

Information Systems students often have difficulty understanding the market forces behind Internet prices. This paper describes a web-based classroom game used to demonstrate the effects of reduced search costs on price levels and price dispersion as well as the possible benefits to both buyers and sellers. The game is available for free and does not require any specialized hardware or software; all that is needed is a computer connected to the internet running a standard browser. The game takes less than 20 minutes and students may participate simultaneously or separately.

2553 Fri Oct 7, 3:00, in Senate B
Refereed Paper

Automating the Development of Data Access Layer

Robert Dollinger .. Univ Wisconsin Stevens Point
Daniel V. Goulet . Univ Wisconsin Stevens Point
David Gibbs Univ Wisconsin Stevens Point

Modern software environments like XDE .NET provide integrated and powerful tools that designers and developers can use in all stages of the application development from building use case diagrams to automatically generating code. Such tools allow a much more systematic and highly automated approach of the entire development process transforming what not long ago was more like an “art” into a better understood engineering activity. Still, there are many challenges that designers and developers have to deal with in order to make the tools work properly and produce meaningful results. Some of these challenges are faced at the sensitive point of passing from the realm of Object Models to the one of Data Models. There is a missing link between these two, which still has to be coded by the application developers in what is called the Data Access Layer. In order to simplify developers’ work we propose a two step approach in automating the creation of a Data Access Layer. The first step co...

2554 Fri Oct 7, 3:30, in Senate B
 Refereed Paper

A Solution to Mixed-type Comparisons in C# .NET

Robert Dollinger .. Univ Wisconsin Stevens Point

Overriding Equals() in order to provide meaningful semantics to object comparisons, turns out to be quite a challenging task, especially when involving objects at different levels of a class hierarchy. One need to reconcile the requirements of the equals contract with the legitimate expectations of programmers of being able to meaningfully compare objects of different types. Langer and Kreft provided an implementation of equality checks for Java class hierarchies where they use a recursive navigation method that performs the non-trivial task of navigating up and down in the inheritance tree in order to make sure that objects on different levels or even on different branches of the inheritance tree are compared

correctly. In this paper we first present a generalized implementation of the navigation method by using reflection and late binding techniques available in C# .NET. In this implementation navigation is still using recursion very much like the one in Langer and Kreft. A non-r...

2555 Fri Oct 7, 4:00, in Senate B
 Refereed Paper

The Potential of Information Systems Applications in Healthcare: Helping People Achieve Longevity

Joseph S. Morrell .. Metropolitan St Coll Denver
Herbert E. Longenecker, Jr. ... Univ S Alabama

This paper introduces a concept for the application of Information Systems to assist people in achieving longevity. To emphasize the breadth and depth of issues affecting longevity, this paper summarizes the healthcare problems facing society. We discuss the role of information systems as offering possible solutions to these problems. Although many health care systems have been implemented, we propose an approach to make these systems accessible to the masses to use on a personal basis. The development of a suitable information systems to resolve these issues would have a significant impact on society. Since this approach is not a component of the information systems curriculum, we suggest how this would impact information systems education.

2562 Fri Oct 7, 2:30, in House A
 Refereed Paper

Is There a Role for Open Source Software in Systems Analysis?

Michael P. Conlon . Slippery Rock Pennsylvania
Frank W. Hulick . Slippery Rock U Pennsylvania

Open source software has enjoyed considerable success in recent years, as measured by the growth both in its popularity and in the number and complexity of available programs. However, there is little mention of open source software in today’s systems analysis textbooks. This paper explores the role that

open source software should play in systems analysis, and in the systems analysis course.

2563 Fri Oct 7, 3:00, in House A
Refereed Paper

A Crystal Ball for Three-Dimensional Visualization

Krishna Kumar Agarwal Louisiana St Shreveport
Sanjay Jain Overton Brooks VA Med Ctr

Three-dimensional display devices have been sought for many years. This paper discusses a display device that produces a true three-dimensional image. This device will be useful for medical applications and in other applications where an image must be viewed from various angles. A simple prototype was built using external projectors. Two alternatives which will produce a much clearer image are discussed.

2564 Fri Oct 7, 3:30, in House A
Refereed Paper

Designing Geographic Information System Courses in the IS Curriculum

Peter Y. Wu Robert Morris University
Frederick G. Kohun ... Robert Morris University

The use of geographic information system (GIS) has been growing tremendously in many areas of application. The low cost of hardware and software, along with the relative ease of access to data on the internet, fueled the proliferation. When IS/IT practices in business begin to seek for a competitive edge in the intelligent use of information, GIS skills and technologies offer new ways of using information, such as those in spatial and topological data analysis. In this paper, we share the design of two GIS courses to expand our IS curriculum: one at the undergraduate level and the other at the graduate level. The courses emphasize the value of GIS applications, while building on the fundamental model of the GIS architecture as the necessary foundation. These include the structures of data and files. We also briefly survey the equipment and sources of data needed to teach the courses effectively. The costs

involved in setting up to teach the GIS courses are relatively low.

2565 Fri Oct 7, 4:00, in House A
Refereed Paper

A Reverse Life-Cycle Database Course with Mini-Projects

Kirby McMaster Weber State University
Nicole Anderson Weber State University
Dona Bilyeu-Dittman ... Weber State University

The usual approach to teaching an introductory database course—as presented in curriculum guidelines from professional societies, in database textbooks, and in papers and presentations—is to sequence the topics according to the database development life-cycle. Students proceed from data modeling to database design to database implementation and operations. In this approach, students are often assigned a semester-long project, where they perform life-cycle activities to develop a single database system. In this paper, some problems with the life-cycle approach are discussed, and an alternative reverse life-cycle approach is suggested. With the reverse life-cycle approach, students begin by performing operations on existing databases, and then learn how to implement their own databases. Data modeling and design topics are delayed until students become familiar with database systems. Instead of a semester-long project, students are given a sequence of mini-projects, where each mini-...

3112 Sat Oct 8, 8:30, in Governors C
Panel

Assessment of Information Systems Program Components: Discrete Math and Statistics, Business and Organizations, Specific Courses and Advanced Study Preparedness

Herbert E. Longenecker, Jr. ... Univ S Alabama
Roy J. Daigle University of South Alabama
Valerie J. Harvey Robert Morris University
John C. Turcheck Robert Morris University
Peter Y. Wu Robert Morris University

Patricia Sendall Merrimack University
Jeffrey P. Landry University South Alabama
Lynn J. McKell Brigham Young University
J. Harold Pardue .. University of South Alabama

The Center for Computing Education Research (CCER), a division of the Institute for Certification of Computing Professionals (ICCP) Education Foundation has developed an examination that qualifies those who pass for the Information System Analyst (ISA) certification (McKell et al, 2004a,b). Also, the exam provides academic institutions detailed assessment analysis according to IS2002 level 3 and 4 learning units (Gorgone et al, 2002), to the sub-skills associated with the curriculum model (Landry et al 2000), and to the ABET accreditation areas (Landry et al 2004). Institutions can compare the behavior of their students with the national sample. They can also use the exam to assess course performance for courses mapped to the IS2002 model curriculum.

3122 Sat Oct 8, 8:30, in Governors D
 Refereed Paper

Modeling Information and Business Systems Architectures – a Team Project

Annette Lerine Steenkamp . Lawrence Tech Univ
Kevin Schiller BCBS Michigan
Kathleen Allour DTE Energy Company
Tony Lyons DaimlerChrysler Services
Anene Nnolim InfoTSG, Inc.

The paper reports on an approach to conducting a team project on information and business systems architectures, adopted in a core course on information technology systems architecture in a Doctoral Program of Management in Information Technology. The rationale of the project is given with special reference to the project charter, the team work, the team approach, and the architectural approach. A number of key deliverables produced by the project team illustrates the architectural methodology followed by the team. A summary of the lessons learned are provided.

3123 Sat Oct 8, 9:00, in Governors D
 Refereed Paper

Jumping off the Distance Learning Bandwagon: Adding Learning Theory into the Strategy

Thomas Janicki Univ North Carolina Wilmington
Alan Burns DePaul University

Distant education and distant learning has expanded rapidly for two and four year educational institutions since the mid 1990's. Both synchronous and asynchronous means of delivering learning' occurs on a daily basis. As these uses grow it is important to recognize the driving forces and future challenges facing distance education for educational institutions. Historically, technology advancements have pushed the educational institutions to new methods of delivery. However the push of technology rarely indicates an optimal strategy for its implementation. Instead strategies must be in place to pull the design and implementation of new technology needed to support the goals of higher education institutions. Especially important is the need to increase learning theories into the delivery of distance learning courses. This paper provides a review of the current and future challenges concerning distance learning for educational institutions include the proper strategic planning f...

3124 Sat Oct 8, 9:30, in Governors D
 Refereed Paper

Exploring Declining CS/IS/IT Enrollments

Terri L. Lenox Westminster College
Charles R. Woratschek Robert Morris Univ
Gary A. Davis Robert Morris University

Declining enrollments in Computer Science (CS), Information Systems (IS), and Information Technology (IT) programs reported by the media are a real concern to both academicians and employers. Ninety-one percent of the respondents to a brief survey confirmed that enrollment was down in their undergraduate programs. The top six reasons for declining enrollment reported were: outsourcing of CS/IS/IT jobs (67%), the economy in general (59.8%), the dot.com failure (48.8%), the cyclic

nature of business (40%), decline in students' analytic abilities (29.26%) and failure of the institution to actively recruit students (26.8%). Respondents reported various attempts to increase enrollments including increased enrollment efforts to local high schools (46.35%), changing the types of courses offered (37.8%), increasing articulation agreements (36.6%), creating new major(s) with other discipline(s) (29.2%), creating new tracks within the major (29.2%), and increasing recruitment efforts to ...

3132 Sat Oct 8, 8:30, in Governors E
Refereed Paper

The Business of Information Technology: An Integrated, Multi-disciplinary Approach to a Capstone Experience for Management Information Sciences Students

Ronald E. Morgan Franklin University
Renee Aitken Ohio Dominican University

This paper describes the development, implementation, and subsequent modifications of a capstone course first developed by Franklin University in 2003. The course is a multi-disciplinary capstone course serving four majors: Finance, MIS, Human Resources, and Marketing. Students engage in a 15 week study, focusing first upon their major, meeting the requirements specific to their program, and second as part of a team consisting of students from each of the majors brought together to deal with a business opportunity. Each team acts as consultants for a company experiencing a variety of business issues in HR, Finance, MIS, and Marketing. The case study is complex, consisting of real-world issues, challenges, and opportunities. The teams develop strategies that directly address the issues and exploiting opportunities, culminating in a professional oral and written presentation.

3133 Sat Oct 8, 9:00, in Governors E
Refereed Paper

Integrating Innovation, Technology, Management, and Personal Success in a Capstone eBusiness Course

Steven A. Gedeon Ryerson University

A capstone eBusiness course has the ambitious goal of not only integrating everything learned in the curriculum over the previous three years, but also of motivating the students and providing the skills needed to achieve meaningful success once they graduate. A framework is provided for integrating innovation, technology, management and personal success in a team-based course. Framework goals are established for each of the four major elements of the course content and include life-long learning skills, acquisition of deeper domain knowledge, goal setting skills, and self-efficacy skills to maximize business and personal effectiveness. The academic literature related to goal-setting theory, valence-instrumentality-expectancy theory, and socio-cognitive theory is reviewed to develop the framework goals selected for the course. Three integrating mechanisms are used as pedagogical tools to ensure that all the framework goals are taught during the course: narrative, key themes, an...

3134 Sat Oct 8, 9:30, in Governors E
Refereed Paper

Teaching ASP.NET in an Information Systems Curriculum

David C. Wallace Illinois State University
James R. Wolf, Jr. Illinois State University

The challenge of providing computer science graduates with the optimal balance between the old and new technology is a never ending process. This paper introduces Microsoft's ASP.Net technology which can be used as a bridge to integrate mainframe and client/server technologies. The paper also describes practical ways to use this bridge technology in the classroom and discusses our experiences using ASP.NET in a recent course.

3142 Sat Oct 8, 8:30, in Senate A
Refereed Paper

A Study of Data Mining and Information Ethics in Information Systems Curricula

James Lawler Pace University
John C. Molluzzo Pace University

Data and the information culled from that data is an extremely valuable organizational resource. Every data mining professional is aware of this, but few are well-educated on the impact that data mining could have on privacy and the laws surrounding the privacy of personal data. In a recent survey, van Wel and Royakkers (2004) showed that 20 data-mining professionals “prefer to focus on the advantages of web-data mining instead of discussing the possible dangers.” These professionals argued that web-data mining does not threaten privacy. Part of the reason some professionals are not concerned over the possible misuse of their work and the possible harm it might cause might lie in the content of the data mining courses they have taken and in the textbooks they used to learn their craft. This paper presents a research in progress study that investigates the need for an expanded role of ethics in data mining education. Our contention is that ethics and the social impact of data m...

3143 Sat Oct 8, 9:00, in Senate A
 Refereed Paper

Do Ethical Views Differ in Different Situations? Using Pathfinder Associative Networks to Compare Views

Jennifer Kreie New Mexico State University
Kerry Alt New Mexico State University
Timothy Paul Cronan ... University of Arkansas
Lori N. K. Leonard University of Tulsa

This paper describes a study that compared how people viewed ethics within the context of different situations. Using Pathfinder associative network analysis, the researchers compared associative networks of three groups of subjects. Pathfinder provides a graphical representation and statistical measure of how people relate ethics terms. The results confirm past scenario-based research that found people’s judgment of what is ethical or unethical is situation-dependent. In addition, the use of Pathfinder associative networks introduced statistical measures and graphical representation of peo-

ple’s view of ethical concepts which have not been used in IT and ethics research.

3152 Sat Oct 8, 8:30, in Senate B
 Refereed Paper

A Soft System Approach to the Design of an Online Case Method Instruction

Minh Huynh . Southeastern Louisiana University
Richard Orwig Susquehanna University

Technology has changed and continues to change the manner in which today’s organizations manage business. The business of education is certainly not immune to technological change. Decisions concerning what, if any, technologies to incorporate into teaching require an understanding of the requirements of learning as well as the capabilities of technology. One approach to developing technological solutions to business problems is the Soft Systems Methodology (SSM) developed by Peter Checkland. This article presents a practical application of SSM to the problem of teaching a distributed case-based course.

3153 Sat Oct 8, 9:00, in Senate B
 Refereed Paper

How Valuable is Planned Data Redundancy in Maintaining the Integrity of an Information System through its Database

Eghosa Ugboma Florida Memorial University

Although planned (controlled) data redundancy increases the distribution of redundant data to a very meager degree, this type of redundancy most often involves few columns of database data files that supports an information system and helps to enforce the integrity of the information system. The effectiveness of an information system depends largely on the database that supports the information system. This paper discusses the importance of planned data redundancy and how it is implemented in assisting an information system to be deemed effective in generating the required data and information to

its intended users. Due to their unique functions and for easy understanding, this paper uses the primary keys and foreign keys columns to demonstrate how planned data redundancy is implemented to help maintain the validity of the data pool that an information system needs to produce the desired information. First normal form (1NF), third normal form (3NF), fourth normal form (4NF), a...

3154 Sat Oct 8, 9:30, in Senate B
Refereed Paper

An Antique Engineering Filing System for Personal Use and as a DBMS Case Study

Ronald I. Frank Pace University

This is document serves four purposes. First: it is a documentation of a 0th generation engineering filing system. Second: it is a call for input from anyone familiar with comparable file systems. Third: it is an introduction to a very useful personal filing system. By documenting an historical file system and interpreting it in terms of modern technology, we derive a filing system that has proved robust and very useful for personal filing systems and for small business use. Fourth: this document describes a very engaging case study use of this simple system employed in a database course as a real database that the students can use.

3162 Sat Oct 8, 8:30, in House A
Refereed Paper

Student Performance Online vs Ongoing: A Statistical Analysis of IS Courses

Gary Ury .. Northwest Missouri State University
Merry McDonald Northwest Missouri State Univ
Gary McDonald . Northwest Missouri State Univ
Brian Dorn Georgia Institute of Technology

In previous papers, the authors reported results of smaller-scale studies. The purpose of this study is to combine and expand those individual smaller scaled studies, to determine if significant differences exist

between student performance in online and traditional classroom environments. The study includes more than 1300 observations spread across seven courses that are part of the computer science and information systems curriculum at Northwest Missouri State University. Student performance was compared by grade point average, ACT composite scores, number of credit hours completed, instructor, and delivery method. The only significant difference found was between student performance and delivery method in three high volume courses that serve multiple majors and minors. Online students in these three courses obtained a significantly lower average grade than onground students. In four other courses that service upper-level computer science majors no significant differences in perf...

3163 Sat Oct 8, 9:00, in House A
Refereed Paper

Successful Course Transition from Traditional Delivery Methods to the Online Format

Gary Ury .. Northwest Missouri State University
Connie Ury Northwest Missouri State Univ

Instructors and course development experts are trying to define methodologies that will facilitate the effective transfer of learning from the traditional classroom to the online environment. Many agree that the most difficult item to emulate in the online environment is effective interpersonal communication between students and instructors. This study examined two lower level information systems courses at Northwest Missouri State University that are mapped to the IS 2002 model curriculum. The purpose was to determine if there were differences in grades between online and traditional students. The researchers were also interested in determining any differences in student—instructor interaction that might exist in the online delivery method between the two courses. Course grades for a management information systems course were compared by instructor, grade point average, number of credit hours completed, and delivery mode. The only significant difference that surfaced was for del...

3164 Sat Oct 8, 9:30, in House A
Refereed Paper

Why Do I Have to Take Calculus?

Jill Gerhardt Richard Stockton Coll NJ
Judith Vogel . Richard Stockton Coll New Jersey
Chia-Lin Wu . Richard Stockton Coll New Jersey

The merits of Calculus for the Computer Science and Information Systems curriculum are discussed, and the under-representation of females and minorities in Computer Science and Mathematics is examined. An experimental course is highlighted which helps to bridge the material between Computer Science and Calculus. The course showcases female and minority involvement in Computer Science and Information Systems and Mathematics. In addition, the course acts as a tutorial for topics in Calculus. Data is presented which supports the success of this course and its objectives.

3312 Sat Oct 8, 10:30, in Governors C
Panel

ABET modifies IS Accreditation

David L. Feinstein ... University South Alabama
Gayle J. Yaverbaum Penn State Harrisburg

ABET is rolling out a dramatically different criteria for IS accreditation.

3322 Sat Oct 8, 10:30, in Governors D
Panel

Papers Committee Meeting

Thomas N. Janicki Univ N Carolina Wilmington
Don Colton .. Brigham Young University Hawaii

The ISECON 2005 Papers Committee will meet to discuss what went right and what can be improved in the 2006 cycle.

3323 Sat Oct 8, 11:00, in Governors D
Panel

ISECON 2006 Organization Meeting

Marcos P. Sivitanides Texas State University
Don Colton .. Brigham Young University Hawaii

ISECON 2006 will be held in Dallas, Texas. All those who have been recruited, or are interested in participating, or in making suggestions for the improvement of future ISECON conferences, are welcome to attend, listen, and participate. But beware lest you be roped into being part of the solution.

3332 Sat Oct 8, 10:30, in Governors E
Refereed Paper

Don't Forget the Manager: Management of IT Professionals by IT Professionals for IT Professionals

Brenda McAleer ... University of Maine Augusta
Joseph Szakas .. University of Maine at Augusta

Computer Information Systems students who enter their profession immediately after college graduation will most probably have positions dealing almost exclusively with information technology services and support. But, it is likely their career ladder will take them at some point into managerial positions. Are these graduates being prepared to assume the duties of a manager of information technology professionals? The core curriculum for these students should not only include those specific computer and information technology skills needed in a constantly changing field, but also include the development of core management skills which embody capabilities and knowledge expected of future leaders in an organization. In this paper, the authors propose an addition to future IT curricula in terms of the outcomes as described in the IS 2002 Model Curriculum.

3333 Sat Oct 8, 11:00, in Governors E
Refereed Paper

Designing an Electronic Commerce Course: An Effort to Balance between Theory and Practice

Chuleeporn Changchit Texas A&M – Corpus Christi
Robert Cutshall . Texas A&M U – Corpus Christi

Gerald C. Gonsalves College of Charleston

The exponential growth of Electronic Commerce (E-commerce) continues as more and more people and businesses connect to the Internet on a daily basis. Consumers can now use their computers to find everything imaginable on the Internet. Everything from searching for information to shopping is available online. Since most employers value extensive experience with website development and are expecting their information system graduates to at least understand how to manage a website, many universities are now offering an electronic commerce course. There are some difficulties in designing such a course. The major issue seems to center on how to design a course which integrates both theory and hands-on learning aspects of E-commerce. Most students tend to appreciate the value of the hands-on component, but somehow forget that the theory behind the website is also important. This paper addresses the issues of designing an E-commerce course for business students majoring in Management...

3334 Sat Oct 8, 11:30, in Governors E
Refereed Paper

Designing an MIS Major for a Liberal Arts College

James Howatt Luther College
Julie Jensen Luther College

This paper describes one effort to establish a Management Information Systems major, largely compliant with the recommendations of the IS 2002 Undergraduate Curriculum Report, by working within the constraints imposed by, and by taking advantage of the opportunities provided by, being a part of a liberal arts college.

3342 Sat Oct 8, 10:30, in Senate A
Refereed Paper

Computer Usage in the Classroom

Andrew Shanbarger Slippery Rock University
Patricia A. Joseph Slippery Rock University

Computer use and availability in the average classroom has dramatically increased over the last thirty years. In the past three decades, a classroom teacher was lucky if one out-dated computer was available for use. Also during this time, a computer's main use in a classroom would be merely word-processing or a drill and practice method of instruction. Many improvements have been made in the quantity and quality of computers in the classroom. However, the overall lack of in-depth teacher training, the improper use of technology, and the incredible variation in the amount of technology available cause many problems.

3343 Sat Oct 8, 11:00, in Senate A
Refereed Paper

Information Warfare

Brandon Himes Slippery Rock University
Patricia A. Joseph Slippery Rock University

Information warfare is the use of information as an instrument of war. Information warfare is a relatively new topic. The development of new technologies such as broadband Internet access, wireless networking, and the dependence of governments and businesses on the functionality of the Internet has been a catalyst for information warfare. Information warfare can take many forms. Some are purely destructive such as Distributed Denial of Service (DDoS) attacks and the creation of viruses, but other methods of information warfare resemble normal use of the Internet such as organizing groups and disseminating information. Although information warfare is typically destructive and is mostly used for terrorism or crime, it can also be used as a powerful, constructive tool that empowers law enforcement and grassroots movements.

3344 Sat Oct 8, 11:30, in Senate A
Refereed Paper

Value Chain based E-Business in the Apparel Retail Industry

Jennifer Pfitscher University West Florida
June Wei The University of West Florida

This paper develops e-value and e-customer chains in terms of e-business to show how Information Technology (IT) could be adopted in the apparel retail industry. The analysis of e-business is classified as business-to-business, business-to-customer, customer-to-business, and customer-to-customer. Items in these four e-business types are classified to show the IT solutions in apparel retail industry. The analysis of these items was performed on the top ten dominant companies in the U.S. apparel retail industry to illustrate the current status of IT adoptions in e-business. The results of this study are beneficial to decision makers and managers in the retail industry to make better decisions on e-business and IT adoptions.

3352 Sat Oct 8, 10:30, in Senate B
Refereed Paper

Web Site Usability in Higher Education

Sandra Christoun Bridgewater State College
Hope Aubin Bridgewater State College
Christine Hannon Bridgewater State College
Robert Wolk Bridgewater State College

The use of Web site technology in higher education presents a challenge. Measurement of Web site usability requires continual analysis. This research investigates student's overall satisfaction with a College's Web site. A research team designed and administered an on-line Likert scale survey, to measure student satisfaction with regard to the College Web site's technology, usability, aesthetics, and content. The researchers used an on-line application survey to reach a large audience with fast and inexpensive delivery. The responses collected represented a significant sample of the College's student population. Over ten percent of the total college population responded to the survey. The on-line survey results indicate that 89.4% of those respondents agreed or strongly agreed that they are, overall, satisfied with the Web site. A test and retest conducted in two classroom two weeks later proved the original findings to be valid. The instrument and methodology employed pro...

3353 Sat Oct 8, 11:00, in Senate B
Refereed Paper

IT Innovations in IT Industries: Does IT pay off?

Emil Boasson Ithaca College
Vigdis Boasson Ithaca College

In the classroom, students tend to ask the question: why do we need to study information technology (IT)? In the real business world, corporate decision-makers constantly ask the question: why do we need to invest in IT? Does it pay off? In this paper, we investigate how the stock market values a firm's IT innovations in order to gain competitive advantage. In other words, we examine the role of IT innovations in the stock market valuation of a firm's expected future cash flows. Our findings indicate that firms that are IT innovators are valued higher than their industry competitors. Clearly, IT innovations seem to pay off in the stock market. In this way, we show that learning IT skill sets in the classroom is important for undertaking IT innovations in the real business world.

3354 Sat Oct 8, 11:30, in Senate B
Refereed Paper

The Stock Market Valuation of IT Innovations: Evidence from the Investment Banking Industry

Vigdis Boasson Ithaca College
Emil Boasson Ithaca College

It is always a challenge to teach students IT skills and capabilities in a non-IT course setting. However, there is an increasing tendency for IT innovations initiated outside the IT organization. It is thus all the more important for educators from non-IT disciplines not only to keep up with technological development but also to motivate students to learn IT skills in a non-IT course setting such as in a finance classroom. In this paper, we examine the role of IT innovations in a non-IT organization such as an investment bank. We empirically investigate whether IT innovations can bring added market value to the

investment banking industry. We find that an investment bank that invests heavily in IT innovations outperforms its industry peers in the stock market. The implication of this finding highlights the need for our educators to motivate our students to gain knowledge of IT even for non-IT disciplines.

3362 Sat Oct 8, 10:30, in House A
Refereed Paper

Teaching an Introductory Programming Course for Non-Majors using Python

Jeff Rufinus Widener University
Y. Kortsarts Widener University

In this paper we present an innovative approach to teaching an introductory programming course for non-majors using the Python programming language. Lecture structure and suggestions of topics (course outline) on developing and designing the course are briefly presented. This teaching approach could be easily adapted to teach introductory programming courses to majors, including Information Systems majors.

3363 Sat Oct 8, 11:00, in House A
Refereed Paper

Design Strategies for the Pedagogical Use of Crossword Puzzle Generation Software, In Individual and Collaborative Design Modes

Elizabeth Avery Gomez New Jersey Inst Tech
Julian Matthew Scher New Jersey Inst Tech

Crossword puzzles represent a powerful pedagogical tool for both the assessment and application of knowledge attained by students in a particular discipline, such as Information Systems. Crossword puzzles may be designed for either individual or collaborative use. Participating students will find it a meaningful educational experience to answer the crossword puzzles created by other students. We shall review some of the available freeware tools for the creation of crossword puzzles, discuss some of the

critical thinking skills enabled by integrating crossword puzzles into a course, and provide (based upon the experience of the authors) design strategies for the effective use of crossword puzzles (both in individual and collaborative modes) in the pedagogical environment.

3364 Sat Oct 8, 11:30, in House A
Refereed Paper

A Perspective on the Use of Modeling Diagrams in Computer Science and Information Systems Curricula

David R. Naugler ... Southeast Missouri St Univ
Ken Surendran .. Southeast Missouri State Univ

Modeling diagrams are used in Computer Science and Information Systems courses. Different tools are used for different paradigms of system development. The authors share their perspectives in using different modeling tools in systems analysis and design and database courses. They discuss paradigm related issues in programming languages. They suggest using the diagrams from both the paradigms (procedure centric and object oriented) with a view to enhancing the value of the curricula.

3372 Sat Oct 8, 10:30, in House B
Refereed Paper

Suggested Characteristics of User Interfaces in Support of IS 2002 Curriculum Model Implementation and Program Accreditation

Steven S. Presley Alion Science and Tech
Herbert E. Longenecker Jr. Univ South Alabama
J. Harold Pardue .. University of South Alabama
Jeffrey P. Landry University South Alabama

The process of classifying information can be a complex task, especially when there are multiple taxonomies. Creating effective user interfaces for searching large, multi-taxonomic hierarchies for information classification purposes is a relevant problem facing human-computer interaction (HCI) researchers and practitioners. This study evaluated

the effectiveness of overview and zoom capabilities in facilitating the task of classifying information in multi-taxonomic hierarchies. Usability tests of alternative interface designs were conducted within an experimental context. The experimental task involves classifying objectives for an information systems course into the multi-taxonomic hierarchies of the IS'97 curriculum model. Overview and zoom capability was operationalized by a multiwindow interface design, and the addition of dynamic query features were used to further increase the level of overview and zoom. Partial support was found for asserting increased levels of overview a...

3373 Sat Oct 8, 11:00, in House B
Refereed Paper

Are High School Students Avoiding the Information Technology Profession Because of the Masculine Stereotype?

Suzanne Cory St. Mary's University
Monica J. Parzinger St. Mary's University
Thomas E. Reeves St. Mary's University

While there are numerous factors influencing a choice in a major area of study, preconceptions or stereotypical views about members of occupations may impact a student's decision to enter a particular field. The purpose of this study is to determine current perceptions of high school students regarding the personality traits of computer specialists. A Personality Factor (PF) Questionnaire is used to collect data. T-tests are then used to identify perceived personality traits of computer specialists. A data mining tool is also used to analyze data clusters. Comparisons are made between these two approaches. Results of the study suggest that high school students view the technology professional as emotionally stable, intelligent, tough-minded, secure and satisfied with themselves. They are also seen as males.

3374 Sat Oct 8, 11:30, in House B
Refereed Paper

Teaching SQL in Database Management for Adult Continuing

Education

Peter Y. Wu Robert Morris University
Jeanne M. Baugh Robert Morris University
Valerie J. Harvey Robert Morris University

We present a detailed plan to teach SQL for adult continuing education as part of an undergraduate course in Database Management. The course offers 3 credit hours and covers a syllabus fulfilling the requirements of a first database course in the IS 2002 Model Curriculum. It runs for only eight weeks to cater to the study plans of adult students. The teaching plan covers SQL and an introduction to the relational data model for the first three weeks. While these 8-weeks courses are very popular because they significantly reduce the time to complete the course, and thus the respective degree programs, we are concerned about sacrificing content or quality. Our goal is to ensure scope of coverage and quality of delivery in the shortened duration. Our teaching plan comprises 14 modules to cover an introduction to the relational data model and to develop the skills of using SQL. It is complete yet very compact. The small learning modules provide greater flexibility for study schedules,...

3512 Sat Oct 8, 2:30, in Governors C
Panel

Publishing in the Journal of Information Systems Education

Albert L. Harris ... Appalachian State University
Jackie Harris Appalachian State University
Ken Surendran .. Southeast Missouri State Univ

This Special Session will discuss various aspects regarding opportunities for submitting and possibly getting papers published in the Journal of Information Systems Education (JISE), the leading academic journal in IS education. In addition, other ways to assist JISE will be addressed and discussed.

3522 Sat Oct 8, 2:30, in Governors D
Refereed Paper

Evaluation of a Virtual Lab

Environment for Teaching Web-Application Development

Jens Liegle Georgia State University
Peter N. Meso Georgia State University

In this paper we explore how one aspect of virtual computing – the virtual lab – effectively addresses many of the challenges of teaching web application development. Based on a case study at a large southeastern university, we begin by providing a description of the technical resources needed to teach such a course. We then briefly describe the shortcomings of previous approaches for providing a suitable environment, followed by a description of the recently implemented virtual lab approach. Thereafter, we report results of a survey that asked students exposed to this environment about their experience and perception of the virtual lab. The paper concludes with a discussion on the benefits, drawbacks, and lessons learned from the virtual lab approach.

3523 Sat Oct 8, 3:00, in Governors D
Refereed Paper

Establishing a Remote Lab for Teaching Enterprise Application Development

Sam Lee ... Texas State University – San Marcos
Mayur R. Mehta Texas State Univ – San Marcos

Many students of Computer Information Systems (CIS) at the McCoy College of Business Administration of the Texas State University – San Marcos live and work in the cities of Austin or San Antonio, which are both more than twenty miles away from campus. It is necessary for these students to use home computers to work on assignments and projects remotely. To study the Java 2 Enterprise Edition (J2EE), students are required to use IBM WebSphere Studio Application Developer (WSAD) as the development tool. This paper presents a method for the establishment of a remote lab in which students can learn how to develop and deploy J2EE applications that connect to database servers.

3524 Sat Oct 8, 3:30, in Governors D
Refereed Paper

The Iconic Computer Interface as Cultural Artifact: Its Role in Maintaining the “Status Quo”

Tonda Bone Tarleton State University

The following is a philosophical consideration of the computer, particularly the graphical user interface (GUI), as a cultural artifact. Basing the examination on the premise that the computer is not a neutral tool but, rather, is an extension of the society creating it, I review potential pitfalls associated with the GUI. Particularly, the GUI can act to relegate computer literacy to a status of usability, rather than conceptual knowledge, and it can also function to further marginalize individuals outside the membership of the dominant culture. Our current notions of “computer literacy” must be revisited under the scrutiny of the computer, particularly the GUI, as a cultural artifact that acts to re-perpetuate the dominant culture’s standards and mores. As instructors, we need to be aware of these inherent detrimental aspects so that we can empower our students to control the tool we call the computer, rather than vice versa. This paper seeks to raise questions and awareness...

3532 Sat Oct 8, 2:30, in Governors E
Refereed Paper

Is it Possible to Assess Information Systems Skills using a Multiple-Choice Exam?

Sharon Paranto Northern State University
Leigh Shillington Northern State University

The percentage of students with knowledge and skills in the areas of computers and technology has gradually increased as the number and level of courses taught in the high schools have expanded. As a result, many business schools are electing to change the core Information Systems requirement in the business curriculum from an introductory computer course to an advanced applications course. This change better prepares business students with the skills they need for success in a global economy. However, when making this change, the decision must be made as to how to place students into the appropriate course, based on their level of

knowledge and expertise. This paper addresses the placement issue and highlights how a well-designed multiple-choice test can be used as a placement tool when logistics and other factors prevent or limit the use of technology in assessing student skills.

3533 Sat Oct 8, 3:00, in Governors E
Refereed Paper

Teaching Object-Oriented Systems Analysis and Design with UML

Robert V. Stumpf Cal Poly Pomona
Lavette C. Teague Cal Poly Pomona

The transition to object-oriented software presents a challenge to information systems (IS) educators, especially in the area of systems analysis and design, as familiar structured methods give way to the Unified Modeling Language (UML). This paper summarizes the principal similarities and differences between structured and object-oriented approaches and provides advice about strategies for teaching analysis and design with UML. Analysis strategies include: capturing the content and structure of inputs in the use case narratives, constructing the domain model one use case at a time, and expressing pre- and postconditions for the contracts in terms of the domain model. Strategies for teaching object-oriented design include: working one use case at a time, and starting with three basic design patterns.

3534 Sat Oct 8, 3:30, in Governors E
Refereed Paper

Mathematics as a Performance Predictor in Information Technology Management

Ryan Rahinel Ryerson University
Norman O'Reilly Ryerson University
Wendy Cukier Ryerson University
Susan Cody Ryerson University

This paper considers admission requirements and their relationship to performance in a university level Bachelor of Commerce program in Information Technology Management (ITM). It examines assumptions underpinning admission requirements - in

particular, the emphasis on mathematics as a predictor of performance. Subject to the limitations of our sample, results reveal that the average grade in their Best 6 Grade 12 courses is the best predictor of final University cumulative grade point average. Despite the emphasis placed on mathematics by Universities and information technology scholars, final cumulative grade point average showed no significant correlation with calculus, algebra and finite mathematics. Separate multiple regression analyses revealed that (i) calculus and English were weak predictors of overall cumulative grade point average and calculus was only marginally more important than English; and (ii) neither calculus nor finite credits (grade over 60) predicted Universit...

3542 Sat Oct 8, 2:30, in Senate A
Refereed Paper

Privacy Primer: An Ethical Review in an Information Systems and Technology Curriculum

Alan R. Peslak Penn State University

One of the most important topics in modern information technology today is the impact of privacy ethics and laws on the design, development, and implementation of information systems and databases, including Internet and electronic commerce websites. Unfortunately, the ethical and legal issues associated with this important topic are rarely addressed formally in information systems or sciences education. This paper presents an overview of the major issues associated with information privacy, suggests relevant sources for instructional content, and develops a series of pedagogical exercises that can be used to instill in current students the key issues associated with the ethical construct of privacy. The background of privacy rights are reviewed as well as legal and regulatory implementations both in the US and internationally. As an example of a specific current technology privacy issue, radio frequency identification is discussed including its privacy ramifications. The report co...

3543 Sat Oct 8, 3:00, in Senate A
Refereed Paper

A Web-Assisted Graduate Course in Cyber and Professional Ethics

John C. Molluzzo Pace University

The importance of an ethics component in the undergraduate education of computing professionals is well established. However, the inclusion of computer and professional ethics in a graduate IS curriculum has not been so well defined. This paper describes an elective graduate course in computer and professional ethics developed by the author during 2004 and taught for the first time in the Spring 2005. The course was taught in a hybrid format consisting of some face-to-face class time and an online component. The author believes that some ethical decisions made by computing professionals will be made by a group aided by communication technology. To simulate this environment, students collaborated on several cases using the group communication facilities in Blackboard (an online courseware tool) rather than meeting face-to-face to discuss the issues. This paper discusses the course structure, grading policy, cases, and several study aids developed for the course. In addition, ...

3544 Sat Oct 8, 3:30, in Senate A
Refereed Paper

Implementation of HIPAA Certification and Training Guidelines for Healthcare Organizations Structured after the IS 2002 Model Curriculum

David Sweatt University of South Alabama
Herbert E. Longenecker, Jr. ... Univ S Alabama
Robert B. Sweeney ... University South Alabama

Every person in a healthcare organization is a member of the Health Insurance Portability and Accountability Act of 1996 workforce, and as such must become HIPAA aware and compliant. Ensuring broad HIPAA compliance requires an effective, flexible, scalable, and comprehensive awareness, training, and certification program. In this paper a comprehensive proposal is advanced to identify work force stratifications, according to stair-stepped cognitively defined levels compatible with work force

responsibilities and, therefore, educational requirements. A parallel structure to the IS'2002 Curriculum Model is presented. The HIPAA model begins with exit skill definitions, the equivalent of courses, cognitively defined learning units, and a skill-learning unit map suitable for implementation of assessment and certification requirements. This is referred to as a HIPAA Curriculum. The primary goal of the proposed HIPAA Curriculum is to achieve competency in the defined HIPAA skill set ...

3545 Sat Oct 8, 4:00, in Senate A
Refereed Paper

Ethics in the Pedagogy of Information Systems

Patricia A. Joseph Slippery Rock University

This paper discusses how one academic department at a state-owned university has successfully embedded ethics into its undergraduate Information Systems program. The Computer Science Department at Slippery Rock University of Pennsylvania has made a concerted effort to emphasize ethics in all of its course offerings, especially in its Bachelor of Science in Information Systems program. Each Information Systems major chooses an Allied Area of Interest in which to apply his or her IS expertise. As most of the Allied Areas are in the School of Business (Accounting, Economics, Finance, Management, Marketing, etc.), these majors also may elect to take Business Ethics, which is taught by Philosophy Department faculty. Eight Information Systems courses required for the major have ethics components embedded in their curricula. Graduates of SRU's Information Systems program have an appreciation of the importance of ethics in the workplace because they have had this importance reinforced ...

3552 Sat Oct 8, 2:30, in Senate B
Refereed Paper

Student Reflection and Reading Reports in Service Learning: An Analysis of a Service Learning Course at Pace University, New York

Andrea S. Taylor Pace University

This paper analyzes both reading and reflection reports assigned in a service learning course taught at Pace University during the Fall 2004 and Spring 2005 semesters. The reading reports were based on instructor-selected articles, poems and speeches. The reflection reports took the form of written reports, graphic presentations, video documentaries, and pieces of artwork. Both components of the course were treated as separate projects, but in the course of grading and discussing the reports, the integral relationship between both components was revealed. It was further evident that the reading assignments had an impact on how the students viewed the community service project they were engaged in and, in some cases, changed their perspectives of community service as a whole. The results of this analysis led to the reassessment, by this author, of how each component could be further utilized in future courses.

3553 Sat Oct 8, 3:00, in Senate B
Refereed Paper

Problem-based Service Learning in a 200-level Systems Analysis and Design Course

Cathy Bishop-Clark Miami University

This paper summarizes an extremely successful problem-based service learning project for a sophomore level systems analysis and design class. Students were divided into three teams of 3-4 students. Each team designed and implemented WebQuests for the client, a second grade teacher at a local elementary school. WebQuests are web-based guided inquiry activities and in our case involved science and social studies curriculum at the second grade level. Students, the client and the instructor reported a highly successful experience. Guidelines for creating a successful problem-based service learning experience are provided and discussed.

3554 Sat Oct 8, 3:30, in Senate B
Refereed Paper

Systems Development Projects –

Gaining Practical Experience while Meeting Community Needs: A Win-Win State of Affairs

Herb Rebhun .. University of Houston-Downtown
Shohreh Hashemi University Houston-Downtown

During their senior year, students in the Computer Information Systems Bachelor degree program at the University of Houston-Downtown are required to complete a capstone Senior Project course under the guidance of the Computer Information Systems faculty. To meet this requirement, either online or in a face-to-face setting, students design and implement systems for various Houston-area businesses at no cost. The students benefit by gaining the needed “real world” experience, and local businesses benefit by having a new system at no cost – a win-win situation. After describing the capstone Senior Projects course at a four-year public institution, this paper focuses on the pros and cons of the Senior Project capstone course and addresses such questions as whether this course should be required or elective, who should be allowed to enroll in it, what the expected outcomes from the course are, what its prerequisites should be, what topics should be covered in the course, what methods...

3562 Sat Oct 8, 2:30, in House A
Refereed Paper

DAMA Foundation Model Curriculum Framework for Post Secondary Education Programs in Data Resource Management

Deborah Henderson DAMA Foundation
Pat Cupoli ICCP
Anne Marie Smith Consultant, Mantua, NJ
Eva Smith Edmonds Community College
Jeff Hoffer University of Dayton

Over the years, many curricula have been developed for various information and computing disciplines. However, the majority of these documents have concentrated on technologies and products – not on the concepts of data and information as a resource to be managed. Emerging international law on acceptable information handling make the case for better basic

education in data resource management. The lack of attention to the information asset has been cited as one reason for a lack of understanding of the value of an organization's data to the overall performance of the company. With the development of a curriculum framework for the Data Management professional, the Data Management Association (DAMA) hopes to increase the awareness of the importance of data and information as valuable, manageable resources. Courses and programs developed around this framework may serve as a foundational education for certification as a Data Management Professional (CDMP) and other formal certific...

3563 Sat Oct 8, 3:00, in House A
Refereed Paper

Coordinated Topic Presentations for Information Systems Core Curriculum and Discrete Mathematics Courses

Valerie J. Harvey Robert Morris University
Peter Y. Wu Robert Morris University
John C. Turchek Robert Morris University
Herbert E. Longenecker, Jr. ... Univ S Alabama

This paper provides practical information on how to design and implement discrete mathematics modules for coordinated presentation in core curriculum and discrete mathematics courses and is intended for information systems programs seeking ABET accreditation or already accredited by ABET. These modules reinforce the application relevance of the topics and are selected for core curriculum course suitability and on the basis of needs and interests of IS students and foster motivation and confidence as well as understanding of how the concepts presented serve them in learning and will serve them in career settings. Experiences in the information systems (IS) and information systems management (ISM) programs at Robert Morris University (RMU) guided the design of this paper. IS 2002 Core Curriculum mapping for the RSU program is provided as an example.

3564 Sat Oct 8, 3:30, in House A
Refereed Paper

An Analysis Of IS 2002 Compliance

in Selected US Business Schools

Marc Waldman Manhattan College
Mehmet Ulema Manhattan College
Kyungsub Steve Choi Manhattan College

This paper examines and analyzes the current state of IS 2002 curriculum-based course offerings among a sample of Information System programs throughout the United States. Central to our examination is the concept of IS 2002 compliance. We define IS 2002 compliance in terms of the ten courses defined in the IS 2002 curriculum guidelines. An Information Systems program is considered to be fully compliant if it offers the equivalent of all ten courses. We examine the issue of compliance and attempt to correlate compliance with such variables as business school ranking, degrees offered, and geography.

3565 Sat Oct 8, 4:00, in House A
Refereed Paper

The Role of Assessment in Accreditation: A Case Study for an MIS Department

Luann Stemler Millikin University
Cheryl Chamblin Millikin University

In preparation for Millikin University accreditation assessment committees were formed at the university and college levels to facilitate the process. The learning goals/objectives of each college and department need to be soundly rooted in the university's mission statement. This paper shares some of the University's and department's experiences, and outlines a procedure for developing an assessment strategy to achieve accreditation and to improve the program.

3572 Sat Oct 8, 2:30, in House B
Refereed Paper

Development of E-Business Solutions in the Internet Retail Industry

Walaipan Kesthong .. University of West Florida
June Wei The University of West Florida

Lai Liu . . . The University of Texas-Pan American
Koong Kai . . . University of Texas-Pan American

The Internet retail industrial volume is increasing continuously, while Information Technology (IT) has not been fully implemented in the Internet retail industry due to factors such as the lack of standards. The current study aims at developing standardized e-business solutions in the Internet retail industry based on value chain analysis in order to accelerate IT adoptions, thereby increase business values. Specifically, three phases were involved. In the first phase, general e-supply, e-value, and e-customer chain models for the Internet retail industry were presented to show how IT could be adopted efficiently. In the second phase, e-business solutions in the Internet retail industry were developed by mapping from the three chain models. In the third phase, the current patterns of IT adoptions in the Internet retail industry were presented by investigating applications of e-business solutions in the top ten dominant companies. From the study, IT adoptions facilitate the com...

3573 Sat Oct 8, 3:00, in House B
 Refereed Paper

The Relationship between Lab Attendance and Academic Performance in a Computer Information Systems Course

Kira L. Barrington . . . Tarleton State University
Dena Johnson Tarleton State University

There is considerable debate among students as to the usefulness of attending the lab portion of information systems courses. The purpose of this paper is to present evidence of the relationship between lab attendance and the academic performance of students in one computer information systems course over a three-semester period. This relationship was tested using data collected from 118 undergraduate students in the required lab portion of a lower-level computer information systems course. The study analyzed attendance records and course grades from three consecutive semesters of the same course using Spearman's correlation coefficient. After conducting statistical analyses, results indicate that higher at-

tendance rates in the lab do lead to higher academic performance by students.

3574 Sat Oct 8, 3:30, in House B
 Refereed Paper

To Catch a Thief: Computer Forensics in the Classroom

Anna Carlin Cal Poly
Steven S. Curl Cal Poly
Daniel Manson Cal Poly

The subject of computer forensics can be challenging and intriguing for students. Teaching this course involves both the technical and legal aspects of investigative procedures as applied to digital evidence. For the instructor, it can involve challenges not found in other areas of information systems. This paper discusses the triumphs and pitfalls of including computer forensics as part of an undergraduate information assurance curriculum.

3575 Sat Oct 8, 4:00, in House B
 Refereed Paper

A Survey of Communication Medium Utilized During IS Group Projects

Hirotooshi Takeda Georgia State University
Roy D. Johnson Georgia State University

All business teams require a mode of communication between team members. In today's business world there are many ways to communicate including individual and group meetings face-to-face, net meetings, teleconferencing, land line phones, cell phones, pagers, e-mail, voice mail, and instant messaging as examples. This study sought to identify media choices for team communication. The means of communication depended upon the team members' selection of resources. Student groups in two team projects were analyzed in this study. Variables controlled in the study include difficulty of the task and group make-up. The groups varied in the amount of collaboration, cooperation, and length of time on task. The media choices were recorded via log entries. Analysis suggested that once a group

started using a particular communication media, the trend of the group was to continue using that same method. This tendency appears to override other parameters such as group makeup or difficulty...

4112 Sun Oct 9, 8:30, in Governors C
Refereed Paper

Fundamentals of Information Systems Alternatives

Craig A. VanLengen Northern Arizona Univ
John D. Haney Northern Arizona University

Diverse computer knowledge of incoming college freshman makes it difficult to teach the IS 2002.1: Fundamentals of Information Systems course included in the IS 2002 Model Curriculum. Some students come in with several years of high school and personal computer use while others have rarely used a computer. The majority of students are somewhere between the two extremes of several years of use and no use. Most have had some use of word processing to prepare reports in high school and Internet use for entertainment and research. A one-size-fits-all approach to computer or technology literacy does not meet the needs of the students and causes student dissatisfaction with the computer literacy course. Colleges and universities need to examine alternatives to provide the needed computer literacy skills and increase student satisfaction while trying to maintain the credit hours generated by this course.

4113 Sun Oct 9, 9:00, in Governors C
Refereed Paper

Using Decision Tree Analysis to Develop an Expert System

Earl Chrysler Black Hills State University

The development of an expert system typically requires a two-member team: the knowledge engineer and the expert. The knowledge engineer needs to extract information from the expert to build a knowledge base that is then used with a set of logical rules to develop the expert system. While performing a

review of the literature in the area of expert systems one may locate several articles that demonstrate the use and effectiveness of expert systems, there is no discussion of any methodology used to develop the expert system. Upon reviewing various methods of determining an approach to logically analyze the results of sequential decision-making, one notes that a popular and apparently efficient method frequently used in this type of situation is the decision tree method. This paper suggests that a very efficient method a knowledge engineer could use is the decision tree analysis approach.

4114 Sun Oct 9, 9:30, in Governors C
Refereed Paper

Low Cost Collaborative Tools for Virtual Communication

Catherine Dwyer Pace University
Parthiv Malani Pace University

How much of the information worker's production depend on collaboration? How much of that collaboration is mediated by information technology? The Gartner group predicts 60% of an individual's work within five years will depend on group input from team members, many located in different countries and time zones (Grigg, 2001). Working in virtual mode with co-workers, clients, and even competitors will be the norm for our graduates. How are universities preparing students for this future? What experience do students have working in virtual teams in their classes? What technology exists to support collaborative group work that is low cost so that it can be widely used by academic institutions? The purpose of this research is to explore the ability to deploy and use of virtual tools for information systems education. Since cost is a critical factor for schools, our goal was to find and evaluate free (or low cost) collaborative platforms appropriate for use in student team projects. We ...

4122 Sun Oct 9, 8:30, in Governors D
Refereed Paper

Transition from Industry to Academia: Reflections of Three New Faculty Members

Julie Jensen Luther College
Craig Rabe Luther College
Steven Runde Luther College
Liang Chee Wee Luther College

One of the key difficulties faced by many small baccalaureate colleges in recruiting for pre-professional positions is their ability to attract qualified and interested candidates. The competition for those candidates is intense because the demand for them exceeds the supply. Besides pursuing an academic career, qualified candidates are also enticed by career opportunities in the industry. Specifically, the difficulty in hiring permanent faculty affects a college's ability to maintain and enhance a management information systems program. The purpose of this paper is to share how a small, private liberal arts college recruited three alumni from the industry to be new faculty members to fill pre-professional positions over the last six years, the factors influencing the alumni's decision to accept the challenge, their reflections on their transition to academia and assessment of their decisions, and the rewards gained.

4123 Sun Oct 9, 9:00, in Governors D
 Refereed Paper

Automated Identification and Data Collection in Global Supply Chain

Ganesh Vaidyanathan . Indiana Univ South Bend

Firms have invested in information systems to reduce inventory, cut labor costs, speed manufacturing, improve profitability, and enhance supply chain management. These systems allow companies to compile previously unheard of amounts of information from one end of an enterprise to the other. However, data collection techniques need to be employed to complement these information systems. Automated identification and data collection technologies allow enterprises to track components and parts through assembly, to track equipment and supplies, to speed fulfillment, and to automate purchases. More and more businesses will adopt these technologies in conjunction with existing data-capture tools to achieve the desired benefits. Managers are figuring out where to deploy what technology and their decisions will be the key to achieving the best return on investment. These technologies can work

in conjunction with other data-capture solutions to provide businesses with more options to me...

4124 Sun Oct 9, 9:30, in Governors D
 Refereed Paper

Small to Medium Size Enterprises and Supply Chain Strategies

Asghar Sabbaghi . Indiana University South Bend
Ganesh Vaidyanathan . Indiana Univ South Bend

The purpose of this study is to develop a conceptual framework to analyze the supply chain management (SCM) strategies by small to medium size enterprises (SME) using Porter's competitive advantage model and to articulate a decision model for these companies. In order to better understand the challenges faced by SME in their quest for competitive advantage in the supply chain, it is critically important to understand their characteristics. Using this conceptual framework, we explore the global competition for SME to formulate supply chain strategies. The study will also examine the type of partnership and integration strategies for SME to improve their strategic positions within the supply chain and add value to the entire supply chain network.

5112 Absentee
 Refereed Paper

Teaching a Collaborative Model of IS Development through Problem-based Learning

Kam Hou VAT University of Macau

This paper investigates the pedagogic issues of information systems (IS) education through the constructivist approach of problem-based learning (PBL). In particular, the paper presents the perspective of how a group of students could be empowered in practicing the process of IS development through the nurturing of self-directed learning and group collaboration. The discussion puts forth the ideas of how to develop PBL groups of students as collaborative learners, as collaborative problem solvers, and as collaborative supporters of individual development

within the group. There are also the concerns over what methods to teach in the development of IS for knowledge work. In particular, the discussion deliberates on the essence of PBL as a model of collaboration applicable to group-based project work in IS development, which is followed by a deeper investigation of the PBL model as a pragmatic means of problem solving in the context of elaborating suitable IS support for peculiar org...

5113 Absentee
Refereed Paper

A Critical Evaluation Database Textbooks, Curriculum and Educational Outcomes

Roy Morien Curtin University of Technology

Thirty year's experience in the IST industry, including 20 years teaching IS subjects, such as database design, have convinced me that IST education is not done well. Whether this manifests itself as poor teaching, or by poor learning, is a moot point, but the outcome seems to be the same. Graduates venture out into the professional world apparently poorly equipped both technically and managerially. This is demonstrated by the many horror stories that abound, especially about poor database design. Given that databases are the central focus and foundation of most business systems, and a major resource in both time and effort to develop and maintain, database education needs to be of the highest order of relevance, practicality and correctness. The problem seems to lie to a considerable extent in the textbooks that are available for college courses. These have problems of fact and process in abundance. This paper narrates some of the experience of the author in anecdotal fashion, ...

5114 Absentee
Refereed Paper

Student Experience of Using Agile Development Methods in Industrial Experience Projects

Roy Morien Curtin University of Technology

The paper will report upon the experiences and reflections of undergraduate students undertaking industrial experience projects in their IT/IS courses. The students utilized an agile, adaptive development approach, sometimes known as a lightweight methodology, or an evolutionary, incremental approach. This paper is discusses the experience of the students, as stated in a substantial feedback questionnaire, and weekly diaries.

5122 Absentee
Refereed Paper

ExtraNet System: Reviewing a Web-based Student Information Tool

Justine Brown .. Christchurch College Education
Sharon Cooke ... Christchurch College Education

The purpose of this paper is to disseminate the process and experiences of a business school developing a web-based information system named the "ExtraNet" - for managing course assessment, recording results, and communicating information to staff, students and external agencies. Using an evaluative methodology, the development process is reviewed and reveals that real-life system development does not follow a clearly defined model but instead is borne from change catalysts such as growth, increased external agency compliance pressures and customer expectations. Finally, this study provides insight into the complex process of systems development, which may assist other higher education providers in achieving successful outcomes in similar projects.

5123 Absentee
Refereed Paper

UML 2 Teaching at Postgraduate Studies – Prerequisites and Practice

Stanislaw Wrycza University of Gdansk
Bartosz Marcinkowski University of Gdansk

The aim of the paper is presentation of the assumptions and conclusions related to the UML 2 application in teaching practice of information systems

development at postgraduate studies. The content of the paper is based on the experiences collected at University of Gdansk during the UML course lectures, laboratories supported by case studies, UML CASE tools and e-learning. The paper starts with the statement of teaching prerequisites of teaching approach to this course. Next, the approach is discussed, as well as didactic infrastructure presented. Mentioned part contains the exemplary component of the teaching process outcome. Problems and challenges related to the approach and its implementation are introduced in part 3. Finally, the conclusions of UML 2 teaching are presented.

Index by Author

Agarwal, Krishna Kumar:	2563	Cooke, Sharon:	5122
Aitken, Renee:	3132	Cory, Suzanne:	3373
Albin, Marvin:	2535	Courte, Jill:	2133
Allour, Kathleen:	3122	Crews, Michael:	2525
Alt, Kerry:	3143	Cronan, Timothy Paul:	3143
Anderson, Nicole:	2565	Cronholm, Stefan:	2523
Aubin, Hope:	3352	Cukier, Wendy:	3534
Barrington, Kira L.:	3573	Cupoli, Pat:	3562
Baugh, Jeanne M.:	3374	Curl, Steven S.:	3574
Beise, Catherine M.:	2143	Cutshall, Robert:	3333
Bentley, John:	2545	Daigle, Roy J.:	1123, 3112
Bhatnagar, Neelima:	2112	Davis, Gary A.:	3124
Bilyeu-Dittman, Dona:	2565	Dettori, Lucia:	2312
Bishop-Clark, Cathy:	2133, 3553	Dittman, Kevin:	2153
Boasson, Emil:	3353, 3354	Dollinger, Robert:	2553, 2554
Boasson, Vigdis:	3353, 3354	Dorn, Brian:	3162
Bone, Tonda:	3524	Drougas, Anne:	2522
Brewer, Jeffrey L.:	2153	Dudley, Thomas J.:	2132
Brown, Justine:	5122	Dwyer, Catherine:	4114
Burns, Alan:	3123	Ekstrom, Joseph J.:	2333
Burns, Alan T.:	2543	Feinstein, David L.:	3312
Carlin, Anna:	3574	Forrester, Lynne:	2534
Ceccucci, Wendy:	2343, 2344	Frank, Ronald L.:	3154
Chamblin, Cheryl:	3565	Frydenberg, Mark:	2134
Changchit, Chuleeporn:	3333	Gedeon, Steven A.:	3133
Chen, Brady:	2363	Gerhardt, Jill:	3164
Choi, Kyungsub Steve:	3564	Ghatge, Gaurav:	2153
Christoun, Sandra:	3352	Gibbs, David:	2553
Chrysler, Earl:	4113	Gomez, Elizabeth Avery:	3363
Cody, Susan:	3534	Gonsalves, Gerald C.:	3333
Colton, Don:	3322, 3323	Gorka, Sandra:	2333
Conlon, Michael P.:	2562	Goulet, Daniel V.:	2553
Conn, Samuel S.:	2534	Grant, Kenneth A.:	2354, 2512
		Hall, Owen P., Jr:	2132
		Haney, John D.:	2533, 4112
		Hannon, Christine:	3352
		Harkins, Ronald J.:	2542
		Harrington, Steve:	2522
		Harris, Albert L.:	3512
		Harris, Jackie:	3512
		Harvey, Valerie J.:	3112, 3374, 3563
		Hashemi, Shohreh:	3554
		Helwig, Janet:	2314, 2522
		Henderson, Deborah:	3562
		Himes, Brandon:	3343
		Ho, Herman:	2354
		Hoffer, Jeff:	3562
		Holsing, Darby:	2162
		Holzmeyer, Teena A.:	2535
		Howard, Elizabeth V.:	2133
		Howatt, James:	3334
		Huett, Jason B.:	2323, 2324

Hulick, Frank W.:	2562	Meyerowitz, Joel:	2163
Huynh, Minh:	3152	Miles, Gail:	2342
Jain, Sanjay:	2563	Miller, Jacob:	2333
Janicki, Thomas:	3123	Molluzzo, John C.:	3142, 3543
Janicki, Thomas N.:	2543, 3322	Morar, Anita:	2163
Jensen, Julie:	3334, 4122	Morgan, Ronald E.:	3132
Johnson, Dena:	3573	Morien, Roy:	5113, 5114
Johnson, Roy D.:	3575	Morrell, Joseph S.:	2555
Jordan, Kurt:	2144	Naugler, David R.:	3364
Joseph, Patricia A.:	3342, 3343, 3545	Nezlek, George S.:	2164
Jovanovic, Robert:	2545	Nikakis, Con:	2545
Kai, Koong:	3572	Nnolim, Anene:	3122
Kalin, Martin:	2312	O'Neil, Therese DonGiovanni:	2112, 2532
Kamali, Reza:	2333	Orwig, Richard:	3152
Kelm, Kathleen:	2342	Owen, William:	2353
Kesthong, Walaipan:	3572	O'Reilly, Norman:	3534
Kocaklh, Mehmet C.:	2535	Paranto, Sharon:	3532
Kohun, Frederick G.:	2564	Pardue, Harold:	2122, 2123
Kortsarts, Y.:	3362	Pardue, J. Harold:	3112, 3372
Kreie, Jennifer:	3143	Parzinger, Monica J.:	3373
Landry, Jeffrey:	2123	Peslak, Alan R.:	3542
Landry, Jeffrey P.:	2122, 3112, 3372	Pfitscher, Jennifer:	3344
Lawler, James:	3142	Pollacia, Lissa F.:	2152
Lawson, Eydie:	2333	Pomykalski, James J.:	2173
Lee, Sam:	3523	Prescod, Franklyn:	2354
Leidig, Paul M.:	2164	Presley, Steven S.:	3372
Lenox, Terri L.:	3124	Rabe, Craig:	4122
Leonard, Lori N. K.:	3143	Rahinel, Ryan:	3534
Liegle, Jens:	3522	Rajaravivarma, Rathika:	2364
Liu, Lai:	3572	Reames, Steve:	2334
Lomerson, William L.:	2152	Rebhun, Herb:	3554
Longenecker, Herbert:	2123	Reeves, Thomas E.:	3373
Longenecker, Herbert E.:	2122	Reichgelt, Han:	2333
Longenecker, Herbert E. (Bart), Jr:	2555	Reynolds, John:	2122, 2123
Longenecker, Herbert E., Jr.:	3112, 3372, 3544, 3563	Reynolds, John H.:	2164
Lunt, Barry:	2333	Roge', Joe:	2525
Lyons, Tony:	3122	Roggio, Robert F.:	2362
Malamoglou, Spiros:	2163	Rufinus, Jeff:	3362
Malani, Parthiv:	4114	Runde, Steven:	4122
Manson, Daniel:	3574	Russell, Jack:	2142
Marcinkowski, Bartosz:	5123	Rydl, Les:	2525
McAler, Brenda:	3332	Sabbaghi, Asghar:	4124
McDonald, David S.:	2172	Scher, Julian Matthew:	3363
McDonald, Gary:	3162	Schiller, Kevin:	3122
McDonald, Merry:	3162	Scott, Elsje:	2163
McKell, Lynn:	2123	Sendall, Patricia:	3112
McKell, Lynn J.:	2122, 3112	Seyed-Abbassi, Behrooz:	2544
McKenzie, W. Brett:	2124	Seymour, Lisa:	2163
McMaster, Kirby:	2565	Shanbarger, Andrew:	3342
Mehta, Mayur R.:	3523	Sharp, Jason H.:	2323, 2324
Meso, Peter N.:	3522	Shillington, Leigh:	3532
		Simpson, Claude:	2525

Sivitanides, Marcos P.:	3323
Smith, Anne Marie:	3562
Smith, Eva:	3562
Somarajan, Chellappan Raj':	2162
Steenkamp, Annette Lerine:	3122
Stein, Andrew:	2545
Steinbach, Theresa:	2312
Stemler, Luann:	3565
Stumpf, Robert V.:	1112, 1113, 3533
Surendran, Ken:	2162, 2364, 3364, 3512
Sweatt, David:	3544
Sweeney, Robert B.:	3544
Szakas, Joseph:	3332
Takeda, Hirotooshi:	3575
Tastle, Jennifer M.:	2322
Tastle, William J.:	2142, 2322
Taylor, Andrea S.:	3552
Teague, Lavette C.:	3533
Thomas, Margaret:	2112
Turchek, John C.:	3112, 3563
Ugboma, Eghosa:	3153
Ulema, Mehmet:	2352, 3564
Upton, Jean:	2112
Ury, Connie:	3163
Ury, Gary:	3162, 3163
Vaidyanathan, Ganesh:	4123, 4124
VanLengen, Craig A.:	4112
Vat, Kam Hou:	5112
Verbrugge, William G.:	2524
Viscelli, Therese:	2172
Vogel, Judith:	3164
Waguespack, Leslie J., Jr:	2332
Waldman, Marc:	2352, 3564
Wallace, David C.:	3134
Wee, Liang Chee:	4122
Wei, June:	3344, 3572
White, Bruce:	2123
White, Garry L.:	2313
Wierman, Mark J.:	2142
Wolf, James R.:	2552
Wolf, James R., Jr.:	3134
Wolk, Robert:	3352
Woratschek, Charles R.:	3124
Wrycza, Stanislaw:	5123
Wu, Chia-Lin:	3164
Wu, Peter Y.:	2564, 3112, 3374, 3563
Yaverbaum, Gayle J.:	3312
Young, William:	2353

Index by University

Alion Science and Technology:	3372
Angelo State University:	2334
Appalachian State University:	3512
Bentley College:	2134, 2332
Black Hills State University:	4113
Blue Cross Blue Shield of Michigan:	3122
Bridgewater State College:	3352
Brigham Young University:	2122, 2123, 2333, 3112
Brigham Young University Hawaii:	3322, 3323
California State Polytechnic University:	3574
Cal Poly Pomona:	1112, 1113
Cal Poly Pomona:	2524, 3533
Calumet College of St. Joseph:	2144
Central Connecticut State University:	2364
Christchurch College of Education:	5122
College of Charleston:	3333
Consultant, Mantua, NJ:	3562
Creighton University:	2142
Curtin University of Technology:	5113, 5114
DAMA Foundation:	3562
DTE Energy Company:	3122
DaimlerChrysler Services:	3122
DePaul University:	2312, 2543, 3123
Dominican University:	2314, 2522
Edgewood College:	2342
Edmonds Community College:	3562
Fitchburg State College:	2363
Florida Memorial University:	3153
Franklin University:	3132
Georgia Institute of Technology:	3162
Georgia Southern University:	2333
Georgia State University:	2172, 3522, 3575
Grand Valley State University:	2122, 2123, 2164
ICCP:	3562
Illinois State University:	3134
Indiana University South Bend:	4123, 4124
Indiana University of Pennsylvania:	2112, 2532
InfoTSG, Inc.:	3122
Ithaca College:	2142, 2322, 3353, 3354
Lawrence Technological University:	3122
Lenoir-Rhyne College:	2342
Linkping University:	2523
Louisiana State University in Shreveport:	2563
Luther College:	3334, 4122
Manhattan College:	2352, 3564
Merrimack University:	3112
Metropolitan State College of Denver:	2555
Miami University:	2133, 2542, 3553
Millikin University:	3565

New Jersey Institute of Technology:	3363	University of Texas Pan American:	2525
New Mexico State University:	3143	University of Texas-Pan American:	3572
Northern Arizona University:	2533, 4112	University of Tulsa:	3143
Northern State University:	3532	University of West Florida:	3344, 3572
Northwest Missouri State University: ...	3162, 3163	University Wisconsin Stevens Point: ...	2553, 2554
Northwestern State University:	2142, 2152	Victoria University:	2545
Ohio Dominican University:	3132	Weber State University:	2565
Ohio State University:	2552	Westminster College:	3124
Ohio University:	2112	Widener University:	3362
Overton Brooks VA Med Ctr:	2563		
Pace University:	3142, 3154, 3543, 3552, 4114		
Penn State Harrisburg:	3312		
Penn State University:	3542		
Pennsylvania College of Technology:	2333		
Pepperdine University:	2132		
Purdue University:	2153		
Purdue University Calumet:	2333		
Quinnipiac University:	2123, 2343, 2344		
Regis University:	2534		
Richard Stockton College of New Jersey:	3164		
Robert Morris Univ: ..	2564, 3112, 3124, 3374, 3563		
Rochester Institute of Technology:	2333		
Roger Williams University:	2124		
Ryerson University:	2354, 2512, 3133, 3534		
Salisbury University:	2143		
Slippery Rock University:	3342, 3343, 3545		
Slippery Rock University of Pennsylvania: ...	2562		
Southeast Missouri St:	2162, 2364, 3364, 3512		
Southeastern Louisiana University:	3152		
St. Mary's University:	3373		
Susquehanna University:	2173, 3152		
Tarleton State Univ:	2323, 2324, 3524, 3573		
Texas A&M University – Corpus Christi:	3333		
Texas State University:	3323		
Texas State University – San Marcos: ..	2313, 3523		
University of Arkansas:	3143		
University of Cape Town:	2163		
University of Dayton:	3562		
University of Denver:	2534		
University of Gdansk:	5123		
University of Houston-Downtown:	3554		
University of Macau:	5112		
University of Maine at Augusta:	3332		
Univ North Carolina Wilmington: 2543, 3123, 3322			
University of North Florida:	2362, 2544		
University of North Texas:	2323, 2324		
University of Pittsburgh at Johnstown:	2112		
University of South Alabama:			
.....	1123, 2122, 2123, 2353, 2555, 3112, 3312, 3372, 3544, 3563		
University of South Dakota:	2162		
University of Southern Indiana:	2535		