ISECON 2004
21st Annual Information Systems Education Conference
Sink Your Claws Into IS

Conference Program

November 4–7, 2004

Welcome to **ISECON 2004** in Newport, Rhode Island. 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 Nov 4, 11:00, in Brenton Hall Workshop |

Moving from VB 6.0 to VB.Net (6 hours)

Wendy Ceccucci .... Quinnipiac University

The goal of this hands-on workshop is to familiarize IT educators with the new Visual Basic.Net and the .Net Framework. Using Diane Zak's book the workshop will step through the chapters explaining the differences between VB 6.0 and VB.Net. The workshop will also discuss the major elements of the .NET Framework and describe some of the major enhancements to the new version of Visual Basic.

| **1132** | Thu Nov 4, 11:00, in America's Cup Workshop |

Discrete Mathematics for Programs Conforming to ABET Information Systems Accreditation

Valerie J. Harvey ..... Robert Morris University
Peter Y. Wu .... Robert Morris University
John C. Turchek ...... Robert Morris University

This workshop provides practical information on how to design and implement a discrete mathematics course for an information systems program seeking ABET accreditation or already accredited by ABET. A matrix correlates the local ABET-accreditable core curriculum with a standard set of discrete mathematics topics to derive relevant topic coverage. Materials, software resources, and teaching techniques are targeted toward needs and interests of IS students and thus foster motivation and confidence as well as understanding of how the concepts presented serve them in learning and will serve them in career settings. The technological and societal reasons for including discrete mathematics in the IS curriculum are covered. Experiences in the information systems (IS) and information systems management (ISM) programs at Robert Morris University (RMU) guided the design of this workshop.

1142 Thu Nov 4, 11:00, in Commodore Perry
Tutorial

Teach the Teachers, a Tutorial on Quantum Key Distribution (Why and How)

Ronald I. Frank .... Pace University

Quantum Key Distribution (QKD) is the use of quantum phenomena to create and distribute secure random symmetric private one-time keys (random bit strings) used for encrypting and decrypting messages. The encryption using these keys is known to be unbreakable even classically. QKD encryption is also called Quantum Encryption (QE). There are products on the market doing this today. DARPA is funding the use of QKD to replace IPSEC on the internet. QKD overcomes the only weakness of classical unbreakable one-time pads - the secure distribution of the pads themselves. Encryption is used for transmitting data securely. In previous papers I have proposed an IS course module covering QE, and I have discussed where it would fit into the IS curriculum. I have analyzed and presented an outline on the prerequisites for such an IS course module and provided an advanced tutorial for faculty or graduate students. This paper is my suggestion, in some detail, for such a module for undergra...

1212 Thu Nov 4, 3:00, in America's Cup
Workshop

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1222 Thu Nov 4, 3:00, in Brenton Hall
Tutorial

How to Map Your IS Program to IS 2002

John H. Reynolds ...... Grand Valley State Univ
George S. Nezlek ...... Grand Valley State Univ
Jeffrey P. Landry .... Univ of South Alabama

Using software developed by the Center for Computing Education Research (CCER), a Division of the Institute for Certification of Computing Professionals Education Foundation (ICCP EF), the tutorial will guide faculty participants through the process of mapping an IS curriculum. The software is accessible from (http://www.is2002.org). The mapping process describes how courses that are part of an institution's undergraduate IS degree program support the educational goals and objectives of the Information Systems Model Curriculum and Guidelines for Undergraduate Degree Programs in Information Systems (IS 2002). A follow-up workshop, offered later the same evening, will demonstrate how to use information resulting from mapping in order to assess and improve courses and curricula and assist in the IS accreditation self-study process.

1232 Thu Nov 4, 3:00, in Vanderbilt Room
Workshop

Establishing College Computer Literacy/Fluency

Helen Wolfe .... Teikyo Post University

Teikyo Post University requires a three credit course in computer literacy as part of its general education core. Every freshman must either pass a waiver examination in computer literacy or successfully complete CIS 112, Introduction to Computers. There is a need to continuously examine the content of these courses as definitions of computer literacy change due to students entering college with greater fluency and technology changes. The workshop will develop a definition for computer literacy that can be applied to plan, deliver, and assess a course resulting in computer literacy/fluency at the college level.

1242 Thu Nov 4, 3:00, in Commodore Perry
Seminar

Teaching Portfolios for Promotion, Tenure and Reflection

Roy D. Johnson .... Georgia State University

In higher education, decisions for promotion, tenure, merit, and reappointment are generally based on judgments of adequacy or excellence in the areas of teaching, research, and service. While the quality of research and service can be assessed objectively via the productivity of scholarly publications/presentations or service engagement, the quality of teaching depends largely on how well the faculty documents his or her teaching effectiveness. The "burden of proof" for teaching effectiveness falls on the shoulders of the faculty members. Developing a teaching portfolio not only provides evidence of one's teaching effectiveness that supports the application for promotion, tenure, or merit; it also offers one with the occasion to reflect on his or her teaching. This seminar will provide an overview of professional teaching portfolio, the functions of a teaching portfolio, types of portfolios, step-by-step portfolio development, cautionary points in portfolio development, and sugg...

1312 Thu Nov 4, 7:00, in Vanderbilt Room
Tutorial

Using IS Mapping for Curriculum Improvement and Accreditation

John H. Reynolds ...... Grand Valley State Univ
George S. Nezlek ...... Grand Valley State Univ
Jeffrey P. Landry .... Univ of South Alabama

The second of a two-part tutorial will demonstrate the usefulness of the mapping process demonstrated in the first tutorial. A set of aggregate and detailed reports will be used to demonstrate how curriculum assessment and improvements can be made, and how accreditation self-studies can be facilitated. The tutorial will demonstrate how to use mapping reports to answer such questions as "how does my curriculum measure up against accreditation standards?", "what learning units are not covered in our curriculum?" and "where are our areas of strength both in breadth and/or depth?"

1322 Thu Nov 4, 7:00, in Commodore Perry
Workshop

How to Develop and Teach a Computer Forensics Course

Christopher Malinowski Long Island U CW Post

Includes an overview of the problems and technology concerns involved in the Computer Forensics field.

2112 Fri Nov 5, 8:00, in Ballroom B
Refereed Paper

Assessing the Effectiveness of Virtual Learning in Graduate Course in Computer Information Systems

Amjad Abdullat .... West Texas A&M University
Neil Terry .... West Texas A&M University

This paper presents empirical results concerning the effectiveness of campus, online, and hybrid (mix of campus and online) instruction in computer information systems. The sample consists of graduate students enrolled in a core MBA course at a regional university. Assessment of enrollment, attrition, grade distribution, faculty evaluation, and course evaluation across the various instruction modes is presented. Holding constant ability, effort, and demographic considerations, students enrolled in the online course scored over two percent lower on the final exam than campus students and six percent lower than hybrid students. There is not a statistically significant difference between student performance on the final exam between campus and online modes, although the hybrid mode of instructions that combines campus and online is shown to be the most effective mode.

2113 Fri Nov 5, 8:30, in Ballroom B
Panel

Administrative Issues in Standardizing and Assessing IS Curricula using the IS 2002 Model Curriculum

James R. Woolen . . . . Ferris State University
George S. Nezlek . . . . . . Grand Valley State Univ
John H. Reynolds . . . . . . Grand Valley State Univ
Mary Sumner . . . Southern Ill Univ Edwardsville
Robert J. Hammell, II . . . . Towson University
Thomas S. E. Hilton . . . U Wisconsin Eau Claire

Whether for state governing boards, regional accrediting associations, or specialized accreditation bodies, outcome assessment is at the top of the list of required activities in every academic program today. Traditionally, Information Systems (IS) programs have relied upon either local exit assessment instruments or national instruments designed for other disciplines for their outcomes assessment.

2122 Fri Nov 5, 8:00, in Vanderbilt Room
Refereed Paper

Object Oriented Analysis and Design: Do We Need More UML in the Classroom?

Richard V. McCarthy . . . . . Quinnipiac University
Bruce A. White . . . . Quinnipiac University
Martin Grossman . . . . Bridgewater State College

UML has emerged as the de facto standard for object oriented analysis and design. It is a complex notational and symbolic language with many features and functions that is methodology independent. A qualitative and quantitative survey of UML users was conducted to determine the extent to which UML meets their needs. This research evaluates the qualitative responses to provide a basis to examine; to what extent do we need to include UML within IT curriculum?

2123 Fri Nov 5, 8:30, in Vanderbilt Room
Refereed Paper

Life after the NHL: A Database Case Study of the Development of the Professional Athlete Transition Institute

Richard V. McCarthy . . . . . Quinnipiac University
Wendy Ceccucci . . . . Quinnipiac University

The Professional Athlete Transition Institute (PATI) is focused on providing educational resources and services to meet the needs of former professional athletes. To meet the goals of the Institute a variety of information pertaining to each athlete must be collected and maintained. This case provides a detailed description of PATI, their data requirements, and the queries and reports that they regularly need to generate. PATI serves as a basis for defining requirements for a comprehensive relational data model. The case requires students to design, develop, and document a database management system.

2124 Fri Nov 5, 9:00, in Vanderbilt Room
Refereed Paper

A Macro Approach to Relational Database Modeling

Douglas M. Kline . Univ N Carolina Wilmington
Charlene Riggle . . . . . University of South Florida

A new data modeling process is presented that addresses some of the weaknesses of the traditional normalization-driven modeling process. Current approaches generally begin with forms or reports for a particular system as rough entities, then taking these entities through a normalization process, inspecting attribute functional dependencies. The proposed approach is entity-oriented, focusing more on fully developing the data entities and their relationships than on scrutinizing functional dependencies among attributes. We argue that this macro approach should result in more communicative models that are more flexible, being less specific to particular applications. We end with a discussion of other topics that arise in relational data modeling.

2132 Fri Nov 5, 8:00, in America's Cup
Refereed Paper

Why C# and Why .NET in The Undergraduate Information Systems Curriculum

Mehdi Raoufi . . Southwestern Oklahoma St Univ
John Maniotes . . . . . . Purdue University Calumet

Considering the rapid pace of changes in the software field and the limited courses that a student can take in languages, the question is which languages are crucial for students to learn in an undergraduate IS curriculum. This paper investigates the necessity of teaching C# and .NET in the undergraduate IS curriculum. It explores the pros and cons of .Net versus J2EE for applications development and differences between C#, C++ and Java, and which one may be the best language for teaching first programming course in IS curriculum.

The computing field has been changing since its inception. Several computing related curricula have been introduced by reacting to new developments in the field and industry requirements. Frequent changes to curricula guidelines require considerable administrative effort. Some of the curricular options are hard to sustain. The authors, after examining the developments over recent decades, present a generalized curriculum in the applied aspects of computing or informatics. This generalized applied computing program of study is flexible to accommodate new developments when they occur without requiring significant curricular redesigns.

2133 Fri Nov 5, 8:30, in America's Cup
Refereed Paper

Object-Oriented Programming with Jeroo in the Information Technology Classroom

Dean Sanders ... Northwest Missouri State Univ
Brian Dorn .... Iowa State University

Jeroo is a tool that helps novice programmers learn fundamental concepts of object-oriented programming. Specifically, Jeroo focuses on objects, methods, and fundamental control structures. The tool is a self-contained environment in which students write and execute programs to control the actions of Jeroos and their interactions with their environment. Simple animation and source code highlighting aid comprehension. Objective data show that the use of Jeroo levels the playing field between males and females with respect to confidence and comfort levels in the course. Other data show reduced withdrawal rates in courses that use Jeroo. Observations and anecdotes indicate that using Jeroo helps maintain student interest and helps encourage experimentation among both novice and experienced programmers. Jeroo is available at www.jeroo.org.

2134 Fri Nov 5, 9:00, in America's Cup
Refereed Paper

Agile Computing Curricula

Anthony J. Duben .. Southeast Missouri St Univ
David R. Naugler ... Southeast Missouri St Univ
Ken Surendran .. Southeast Missouri State Univ

2142 Fri Nov 5, 8:00, in Commodore Perry
Refereed Paper

A Project-based Model for an Advanced Web Site Design and E-Commerce Course

Paul Kovacs .... Robert Morris University

This paper outlines a model for the teaching of a project-based undergraduate course in Advanced Web Site Design. This model combines the major principles of systems analysis and design with the tools, techniques, and procedures necessary to guide students through a hands-on, systematic process of creating a well-designed, interactive Website. Also delineated is the identification of the fundamental skills the students should possess, appropriate Web development tools and pedagogy as well as whether or not to utilize a simulated project or a real-world project.

2143 Fri Nov 5, 8:30, in Commodore Perry
Refereed Paper

Innovative Technologies in a Systems Integration Curriculum: XML and Microsoft Visual Studio .NET

Alan Peslak .... Penn State University

As a part of an upper-level systems integration course, the author incorporated instruction and

projects in current integrative programming technologies, XML and Microsoft Visual Studio.NET. This paper provides an overall background on XML and IDEs and a review of the literature concerning their instructional implementations. A program of basic instruction is then reviewed and illustrated to provide a framework for the inclusion of these technologies in an information systems and sciences curriculum. Included is an active approach for learning server side programming in MS Visual Studio. The author includes exercises and evaluations of his implementation.

2144   Fri Nov 5, 9:00, in Commodore Perry
Refereed Paper

Shift the Subject of System Analysis and Design from Construction to Acquisition

Shouhong Wang .... Univ of Mass Dartmouth
Hai Wang .... Saint Mary's University

Commercialized business application software packages and ERP systems have been widely used to implement business information systems. The major tasks of business information system analysts and designers have been shifted from system construction to system acquisition. This paper proposes the subject of information systems acquisition for the information SAD course. It suggests that the theme of information SAD for business students shall be system acquisition analysis and decision making. It also examines the issues of incorporating system acquisition into the SAD textbook and teaching system acquisition.

2212   Fri Nov 5, 10:00, in Ballroom B
Refereed Paper

Assessment Loop for the MIS Program at Central Connecticut State University: A Practice of Learning, Reflection and Sharing

Olga Petkova ... Central Connecticut State Univ
Andrzej T. Jarmoszko ... Central Connecticut St

This paper describes one department's efforts to institute a program assessment process. Based on the results of a previously conducted pilot assessment, the department is in its second assessment loop. Some theoretical foundations of outcomes assessment are provided and their suitability for the Management Information Systems discipline is discussed.

2213   Fri Nov 5, 10:30, in Ballroom B
Refereed Paper

Assessing the Learning Outcomes of a Computer Information Systems Program

Samuel Abraham .... Siena Heights University

In recent years greater attention has been paid to develop learning outcomes for academic programs and then to develop methods to assess these learning outcomes. Generally speaking, there are two kinds of outcomes: course outcomes and program outcomes. Assessments of these learning outcomes in institutions of higher education are mandated by the accrediting organizations. This paper describes a methodology used by a Computer Information Systems program in a small undergraduate institution to develop its learning outcomes, to collect assessment data, and to evaluate or assess its course and program outcomes.

2214   Fri Nov 5, 11:00, in Ballroom B
Refereed Paper

Lessons Learned From Online vs. Paper-based Computer Information Students' Evaluation System

Jens O. Liegle .... Georgia State University
David S. McDonald .... Georgia State University

Many universities are offering online courses these days. What follows consequently is that instructors are being evaluated online as well, and due to - among other reasons -potential cost savings, even some traditional courses are being evaluated online now as well. This paper presents the results from a

pilot test at a large south-eastern universities' Computer Information Systems department within the college of business of moving to online evaluations. The results show that some faculty did not like to be evaluated online due to fears of receiving lower scores or lower response rates; however, our study showed that there was no difference in the important instructor effectiveness question in paper vs. online evaluations, and - due to special circumstances - that online evaluations had an even higher response rate than paper based evaluations.

2215 Fri Nov 5, 11:30, in Ballroom B
Refereed Paper

Defining the Essential Skill and Functional Areas of Study in Information Technology as Measured by a Survey of Field Professionals

Donald J. Caputo ..... Robert Morris University
Paul Kovacs .... Robert Morris University
John C. Turchek ...... Robert Morris University

This paper reports the survey results of a representation of the Southwestern Pennsylvania regional technological corporate community. The purpose was to determine what Areas of Study in Information Technology these professionals consider essential, usable, and non-applicable to the current corporate workforce in their respective organizations. Specific skills of a technological nature, as well as general areas of computer-related functional competencies, such as networks and databases, were derived through a questionnaire response. The results were tabulated to identify the key technological skills considered essential to higher education curricular offerings in Information Technology programs.

2222 Fri Nov 5, 10:00, in Vanderbilt Room
Panel

Discrete Mathematics: An Option for ABET Accreditation, but Does it Make Sense as a Support Course for an Information Systems Curriculum?

Herbert E. Longenecker, Jr. ... Univ S Alabama
Roy J. Daigle ..... University of South Alabama

Valerie J. Harvey ..... Robert Morris University

It has always been argued that mathematics plays an important role in development of technical problem solving abilities of Information Systems professionals. Certainly, algebra, calculus and statistics have been though to be relevant supporting disciplines for information systems programs. While computer science discipline has recognized the relevance of discrete mathematics, and in fact, requires competency in the discipline for accreditation. ABET (2004) accreditation standards have acknowledged the potential relevance of discrete mathematics to the information systems discipline, and allows discrete mathematics to be counted among the three course requirement for mathematics and statistics needed for program accreditation. Yet, there is far less than acceptance of discrete mathematics among IS faculty as an acceptable requirement. Indeed, many faculty feel that the discipline is esoteric, and a playground for rogue mathematicians to terrorize unsuspecting IS students.

2224 Fri Nov 5, 11:00, in Vanderbilt Room
Refereed Paper

Teaching Soft Skills in a Systems Development Capstone Class

Jack Russell ..... Northwestern State University
Barbara Russell .... Northwestern State Univ
William J. Tastle .... Ithaca College

Industry recruiters have been telling the same story for many years about the importance of interpersonal communication skills and teaming within the classroom. The most important attribute new college graduates can bring to the workplace is their ability to communicate effectively in both oral and written format. Unquestionably, industry views the student's ability to communicate, ability to cooperate, and ability to work in diverse environments as very desirable and necessary skills. A more rigorous approach to the teaching of soft skills within the information systems curricula is needed if IS educators are able to adequately prepare the IS student for the future. The soft skills most frequently enumerated by industry are the ability to: 1) demonstrate effective interpersonal relations, 2) demonstrate self-management strategies, 3) work within

teams, 4) solve problems creatively and 5) make decisions. The authors have described a Model IS Capstone Systems Development Cours...

2225 Fri Nov 5, 11:30, in Vanderbilt Room
Refereed Paper

Parallel Computing for IS Majors

Jeff Rufinus .... Widener University
Y. Kortsarts .... Widener University

Most introductory parallel computing courses are designed for computer science students. With the increasing applications of parallel computing in many different areas including the Internet and World Wide Web, it is of great advantage to introduce the concept to Information Systems majors. In this paper we present some examples and suggestions of topics on developing and designing a parallel computing course for Information Systems majors.

2232 Fri Nov 5, 10:00, in America's Cup
Talk

IS As a Foundational Discipline for Contemporary Business

W. Brett McKenzie .. Roger Williams University

The Information Technology (IT) field has undergone a period of self-examination with Information Systems (IS) in many ways leading the debate about self-definition as a discipline. While helpful to the members, the paper suggests that IS could enhance its standing by recognizing and advocating a position as a foundational discipline for business education. To support this position the paper reports on a preliminary survey of faculty and students regarding the importance of IT for business and majors as a means of validating perceptions of the central role of IT for business.

2233 Fri Nov 5, 10:30, in America's Cup
Refereed Paper

Building a Computer Program Grader

Don Colton .. Brigham Young University Hawaii
Leslie Fife ... Brigham Young University Hawaii
Randy Winters .... Brigham Young Univ Hawaii

Students often learn best by doing, and they may learn programming skills best by writing many programs, ranging from simple to complex. Overworked teachers can be dismayed by the prospect of grading still more programs per student as well as teaching introductory classes with ever larger enrollments. We present GradeBot, an automatic grader for computer programming lab assignments. The automatic grading approach offers substantial advantages and opportunities, but also some disadvantages and challenges. GradeBot evaluates student programs written in any of several languages, including C, C++, Java, Perl, Tcl, and MIPS assembler. Guidance for similar projects is provided through a discussion of the construction and operation of GradeBot.

2234 Fri Nov 5, 11:00, in America's Cup
Refereed Paper

Comparison of Teaching Java in a Computer Classroom / Traditional Classroom vs. Smart E-Classroom and its Effect on Critical Thinking: A Case Study

Jennifer D.E. Thomas .... Pace University
Jean F. Coppola .... Pace University
Michael Braudy .... Pace University
Barbara A. Thomas ..... SUNY Westchester CC

In this paper, the results of a study conducted to assess the impact on students' critical thinking, performance and perceptions, of different types of technology access in a Java graduate Computer Science course, are presented. The results indicate that students in a smart e-classroom perceived better support for the acquisition of various analytical skills, including critical thinking, than those supported by a traditional computer classroom. In addition, these graduate students achieved higher critical thinking scores, as evidenced by the California Critical Thinking Skills Test (CCTST) assessment tool, and marginally higher grades in the technology rich smart e-classroom than in the standard computer classroom.

2235 Fri Nov 5, 11:30, in America's Cup
Refereed Paper

Mobile, Agile, Versatile: The Use of Tablet PCs and Wireless Technology in Introductory Programming

Jim McKeown .... Dakota State University

This paper focuses on the use of wireless and mobile technology and the latest teaching and collaboration software in an introductory Visual Basic Programming course. This course is a general education course and presents unique educational challenges and opportunities.

2242 Fri Nov 5, 10:00, in Commodore Perry
Tutorial

Quantum Key Distribution for IS educators

Ronald I. Frank .... Pace University

Quantum Key Distribution for IS educators

2243 Fri Nov 5, 10:30, in Commodore Perry
Refereed Paper

An IS Undergraduate Course Module on Quantum Key Distribution

Ronald I. Frank .... Pace University

Quantum Key Distribution (QKD) is the use of quantum phenomena to create and distribute secure random symmetric private one-time keys (random bit strings) used for encrypting and decrypting messages. The encryption using these keys is known to be unbreakable even classically. QKD encryption is also called Quantum Encryption (QE). There are products on the market doing this today. DARPA is funding the use of QKD to replace IPSEC on the internet. QKD overcomes the only weakness of classical unbreakable one-time pads - the secure distribution of the pads themselves. Encryption is used for transmitting data securely. In previous papers I have proposed an IS course module covering QE, and I have discussed where it would fit into the IS curriculum. I have analyzed and presented an outline on the prerequisites for such an IS course module and provided an advanced tutorial for faculty or graduate students. This paper is my suggestion, in some detail, for such a module for undergra...

2244 Fri Nov 5, 11:00, in Commodore Perry
Refereed Paper

Security-Related Research and Projects in Computing Promote Student Awareness of Security Issues

Charles C. Tappert .... Pace University
Sung-Hyuk Cha .... Pace University

Security informatics represents a paradigm shift in university curricula in computing. In order to meet this challenge we will require a systemic curriculum change beyond the usual local course and program changes that have successfully handled smaller technological advances and shifts in the past. One of the novel approaches we use to teach information security at Pace University is to introduce security-related topics, research, and projects into our existing CSIS courses. We teach our masters and doctoral students how to conduct research and write dissertations in a number of areas of computing. Also, our student project teams at both the graduate and undergraduate levels are accustomed to developing real-world computer information systems for actual customers. In recent years, and especially since 9/11, we not only direct more of our faculty research toward security issues but also encourage more security-related student research and supervise more security-related student...

2245 Fri Nov 5, 11:30, in Commodore Perry
Refereed Paper

The Student-Professor Research Relationship: Examining IS Employer Skills Expectations

Gerald F. Braun .... Xavier University
Debbie B. Tesch .... Xavier University

Ryan Skeldon .... Xavier University

The Jack and Mary Kay Downing Scholar program at Xavier University funds undergraduate research designed to pair undergraduate scholars with faculty for work on a scholarly project developed over the course of three semesters. This paper describes the current process in a scholar program designed to complete a literature investigation, and to develop, implement, and analyze a survey designed to measure (1) entry-level IS/IT skill expectations of knowledge/skill area requirements as described in the literature and (2) employers' satisfaction with knowledge/skills possessed by recent hires.

2252 Fri Nov 5, 10:00, in Astor Room
Talk

Advising the Unsuccessful Student

Ronald B. Finkbine ..... Indiana Univ Southeast

How do you successfully advise the unsuccessful/withdrawing/flunking student? This is an area about which a teaching faculty member rarely finds articles. But it is truly an important area for the teaching faculty member to be able to interact with students. The first suggestion to make is to not totally abandon the Computer Science field; the worst thing to do is quit college. If a student has managed to complete more than two classes in the computer science major then they have some ability that they should not ignore in their effort to pursue a university education and a career. This paper covers the general topics that should be discussed with an unsuccessful student.

2253 Fri Nov 5, 10:30, in Astor Room
Refereed Paper

Initial Experiences with a Capstone Approach to an Introductory IS Course (IS 2002.1)

Laurie Schatzberg ..... University of New Mexico
David Harris .... University of New Mexico

This work reports on the initial results of the introduction of a new capstone introductory IS course for undergraduate business majors. The redesigned course is placed near the end of students' business degree program and has several pre-requisite courses. The focus of the course is on analysis of IS cases within the context of a whole business organization. While the course remains in development, the initial results are promising.

2254 Fri Nov 5, 11:00, in Astor Room
Refereed Paper

Implementation of a Basic Computer Skills Assessment Mechanism for Incoming Freshmen

Debbie B. Tesch .... Xavier University
Marianne Murphy .... Xavier University
Elaine Crable .... Xavier University

Basic computer skills assessment for incoming freshmen provides an opportunity for placement appropriate to the students' present skill level. At this university, assessment for incoming freshmen was begun in the College of Business in order to ensure that students entering the information systems core course have a set of requisite skills in file management, word processing, spreadsheet, and presentation graphics processing before entering the MIS core course in the College of Business. This paper describes the implementation and placement results of this process for incoming freshmen at a private liberal arts university in the Midwest.

2255 Fri Nov 5, 11:30, in Astor Room
Refereed Paper

Service Learning in Computer Information Systems: "Significant" Learning for Tomorrow's Computer Professionals

Bruce M. Saulnier .... Quinnipiac University

This paper makes the case for employing Service Learning as an educational paradigm in Computer

Information Systems education. L. Dee Fink's taxonomy of "Significant Learning" is presented and Service Learning is defined and discussed. The case is made for using a Service Learning approach for today's college students. Examples of Service Learning in Computer Information Systems courses are presented at both the undergraduate and graduate levels. It is shown that using a Service Learning approach yields significant learning in Computer Information Systems education. Implementation issues are discussed and future directions for curricular development are presented.

2412	Fri Nov 5, 3:00, in Ballroom B Refereed Paper

Reversing Declining Enrollments: Introducing Minors to Reach New Student Markets within the University Community

Daniel Farkas .... Pace University
Narayan Murthy .... Pace University

There is a lot of debate regarding the causes of declining enrollment in the computer and information sciences. Many believe the apparent loss of jobs in the information technology sector can be blamed for the dramatic decline in enrollments departments have experienced. While the issues of dot-com implosions and offshore outsourcing make the headlines, it is not clear that there is a shortage of jobs. This paper describes a way to revitalize enrollment by creating curricula attractive to students who are not computing majors. Two minors in Internet technology are described which can be taken by students with either strong technical interests or by those whose interests are more related to organizational support (e.g. marketing, web design, etc.). Enrollments in these minors resulted in increasing the number of non-majors taking computing courses.

2413	Fri Nov 5, 3:30, in Ballroom B Refereed Paper

A Guide for Establishing an Advisory Board for an Information Systems Department: Benefits and Lessons Learned

Thomas N. Janicki Univ N Carolina Wilmington

The volume of knowledge required from today's graduates in Information Systems continues to grow rapidly. It is valuable for faculty to form alliances with industry professionals in order that the faculty stays abreast of industry needs, technological changes and seek input about curriculum issues. This paper provides an overview of the process to establish an advisory board for an information systems department at one public university. The goals of this advisory board are to increase the quality of our students, encourage the hiring of IS graduates, increase the faculty's knowledge of employer needs, and provide a forum for faculty to stay abreast of current trends in the information technology profession. The paper will also discuss lessons learned and the benefits gained to date.

2414	Fri Nov 5, 4:00, in Ballroom B Refereed Paper

A Case Study in Optimizing Computer Laboratory Resources: The High-Speed Backup and Restoration (HiSBaR) System for Computer Lab Workstations

Robert B. Sweeney ...... Univ of South Alabama

This paper describes HiSBaR (High-Speed Backup and Restoration) which is a system developed to allow students performing projects to perform a high-speed backup or restoration of the entire project, including an operating system installation to a server. This HiSBaR system allows for more efficient use of limited computer laboratory resources as well as providing a more flexible laboratory environment that is not difficult to maintain. In addition, students using this computer lab were able for the first time to perform the projects individually and consequently gain a greater understanding over the subject matter.

2415	Fri Nov 5, 4:30, in Ballroom B Refereed Paper

Campus-Wide Integrated Information

System Implementation: A Case Study

Liang Chee Wee .... Luther College

A campus-wide information system is a major undertaking regardless of the size of the institution especially when the legacy infrastructure was one of "best of breed" approach for each administrative unit. Transitioning from a "silo" approach to an integrated strategy requires a change in thinking and processes. The project to implement an integrated information system began in the spring of 2000 at Luther College. In spring of 2004, all the major modules of the new integrated system were put in place. The challenges faced along the way, the benefits harnessed, and the lessons learned will be discussed. Overall, the project was on time and within budget.

2422 Fri Nov 5, 3:00, in Vanderbilt Room
Refereed Paper

ABET Accreditation of MIS Programs in AACSB Schools

Thomas S. E. Hilton ... U Wisconsin Eau Claire
Dale A. Johnson .. Univ of Wisconsin Eau Claire
George M. Kasper   Virginia Commonwealth Univ

The development of ABET/CAC accreditation standards for IS programs would appear to present an excellent opportunity for IS programs in AACSB-accredited business schools to improve their quality and credibility. A comparison of AACSB and ABET/CAC accreditation standards finds them to be generally quite compatible with one another. A survey of IS program leaders in AACSB-accredited business schools found familiarity with and interest in ABET/CAC standards to be just emerging. Although compliance with the ABET/CAC standards is evidently relatively high among most programs, understanding of potential benefits of accreditation is quite low. Also quite low is understanding of how colleagues might react to accreditation efforts.

2423 Fri Nov 5, 3:30, in Vanderbilt Room
Refereed Paper

IS 2002 and Accreditation: Describing the IS Core Areas in Terms of the Model Curriculum

Jeffrey P. Landry .... Univ of South Alabama
J. Harold Pardue .. University of South Alabama
John H. Reynolds ...... Grand Valley State Univ
Herbert E. Longenecker, Jr. ... Univ S Alabama

The authors propose a reasonable linkage between information systems (IS) curriculum accreditation and the IS 2002 model curriculum by mapping the learning units of IS 2002 into the six IS core areas defined by IS curriculum accreditation guidelines. The implication of the mapping is to facilitate a straightforward aggregation of bottom-up, outcome-based course assessment data for use in curriculum accreditation.

2424 Fri Nov 5, 4:00, in Vanderbilt Room
Refereed Paper

Comparing Current IS Curricula to the IS 2002 Model Curriculum

Craig L. Williams ...... Susquehanna University
James J. Pomykalski ... Susquehanna University

Information systems applications and technologies are facing constant and rapid change. It is the responsibility of the education system to give students the skills to meet the requirements of an entry level position and at the same time prepare them to learn new skills. Are today's colleges and universities providing the right type of education for future IS professionals? In this paper, we examine the current IS curricula of over 130 AACSB-accredited business programs to determine how closely they are modeled after the IS 2002 Model Curriculum. We discuss the possible impact of programs that do not offer complete coverage of the model curriculum.

2425 Fri Nov 5, 4:30, in Vanderbilt Room
Refereed Paper

The Pros and Cons of Using a Comprehensive Final Case Project in a Database Management Systems

Course: Marvin's Magnificent Magazine Publishing House

Terri L. Lenox .... Westminster College
Charles R. Woratschek ..... Robert Morris Univ

There are many challenges in providing a curriculum with a solid Information Systems foundation that meshes with the rapid changes in technology and its use within organizations. Educators must struggle to fit all the necessary information into a limited number of credits while continuing to add skills including soft-skills. One particular area of pressure is the need to expand topics in the typical database management course due to the increased importance of databases in organizations, the tremendous volume of data that must be handled, non-traditional types of data (e.g., multimedia, web-based) and the expanding array of database-related tools. This paper discusses the pros and cons of using a comprehensive database project as the culmination of an introductory course in database theory and design. An instructor-created, team database project is described. Marvin's Magnificent Magazine Publishing House database has provided students with a valuable experience on the four mos...

2432 Fri Nov 5, 3:00, in America's Cup
Panel

Publishing in the Journal of Information Systems Education

Albert L. Harris .... Appalachian 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.

2434 Fri Nov 5, 4:00, in America's Cup
Refereed Paper

Aligning IT Skills Training With Online Asynchronous Learning Multimedia Technologies

Albert Hayashi .. Claremont Graduate University
Charlie C. Chen .. Appalachian State University
Hiro Terase .... Appalachian State University

With so many different content delivery methods and available instructional technologies, developing the ideal environmental learning profile of IT skills, training tasks and online asynchronous learning (OAL) multimedia technologies is critical. By understanding the most effective OAL multimedia technologies to apply and in what context, the alignment will help organizations improve learning outcomes. The task/technology fit theory is replicated in the context of an OAL environment to examine multimedia technologies from a social context where end users adopt them to improve learning performance.

2435 Fri Nov 5, 4:30, in America's Cup
Refereed Paper

Course Mentoring: Toward Achieving Consistency in the Curriculum

Lucia Dettori .... DePaul University
Amber Settle .... DePaul University

One the main challenges in achieving consistency in the curriculum is the delivery and coordination of multi-section introductory courses. The mix of adjunct, new, and seasoned instructors, the frequent changes in course content and learning goals, and the non-homogeneous student body are some of the factors that makes successfully teaching such courses a challenge. In this paper we describe how the course mentoring project combines personal involvement with a technological solution to build an effective knowledge-sharing virtual community. Course mentoring has proven to be an efficient way to address and overcome the challenges of teaching introductory computer science courses.

2442 Fri Nov 5, 3:00, in Commodore Perry
Refereed Paper

A Funny Thing Happened on the Way to the Form: Using Game Development and Web Services in an Emerging Technology Course

Randy Connolly .... Mount Royal College

This paper presents the results of an emerging technology course devoted to web services and games development. The paper defines web services and service-oriented architectures in general, covers the rationalization for the approach taken in the course, and describes the scope and design of the game project. It also suggests how web services and/or game development can be integrated into an upper-level emerging technology course, and analyzes the students' (and the instructor's) learning experience in the course.

2443 Fri Nov 5, 3:30, in Commodore Perry
Refereed Paper

An Approach to Teaching IT Life Cycle Processes

Annette L. Steenkamp ..... Lawrence Tech Univ
David J. Van .... Lawrence Tech Univ

This contribution reports on an approach to teaching a course in information technology (IT) life cycle processes in a doctoral program of management in information technology. This program is designed for the practitioner scholar with high levels of managerial, technical and analytical expertise in the subfields of IT. The three credit hour course is one of five courses in the major track of the DMIT dealing with key information technology areas. The aspects of course design, pedagogy, assignments and team project are described with reference to an educational process model. The approach to course assessment and process modeling are summarized in terms of the course design criteria. The course offered a learning experience with learning outcomes in four categories, namely: 1. theoretical – the principles and methodologies of IT process modeling within the context of business processes; 2. informational outcomes in terms of leading edge trends in IT enabled business practice; 3. ...

2444 Fri Nov 5, 4:00, in Commodore Perry
Refereed Paper

Information Assurance Education and the IS Curriculum

Kevin Lee Elder ..... Air Force Institute of Tech
D. Dennis Strouble .... Air Force Inst of Tech
Dave Bouvin .... Air Force Institute of Tech

In this paper we will summarize the recent efforts of the Graduate Information Resource Management (IRM) program at the Air Force Institute of Technology to offer a specialization/track in Information Assurance to our students taught from an IRM perspective. This program is built off of the National Security Agency's (NSA) 4012 Certification for Information Assurance. The NSA has identified sixty Centers of Excellence in Information Assurance Education. The majority of the Centers are primarily housed in Computer Science Departments or the courses offered are primarily taught by Computer Science Faculty (45 out of 60). By mapping our curriculum to the certification requirements for the NSA 4012 and mapping those to the knowledge clusters within the course's learning objectives using the Maconachy Model we believe we have an interesting and robust Information Assurance Curriculum that others may want to compare to and investigate.

2445 Fri Nov 5, 4:30, in Commodore Perry
Refereed Paper

Is Database Curriculum Information Systems or Information Technology: An Accreditation Dilemma

Barbara J. Nicolai .. Purdue University Calumet

This paper addresses the dilemma of how the Database curriculum is positioned into an accreditation model, either the Information Systems (IS) 2002 Model Curriculum and the Guidelines for Undergraduate Degree programs in Information Systems or the Draft Accreditation Criteria - Baccalaureate Programs in Information Technology. In discussing these issues, the author will discuss the background of the IS 2002 Model, the Association for Computing Machinery (ACM) Special Interest Group for Information Technology Education accreditation draft document, the Accreditation Board for Engineering Technology (ABET) accreditation process, examples of database curriculum under both an Information Systems and Information Technology model, a comparison of the two perspectives and conclude with

a recommendation choosing either the Information Systems or Information Technology Accreditation Model.

2454 Fri Nov 5, 4:00, in Astor Room
Panel

Service Learning in Information Systems

Bruce M. Saulnier .... Quinnipiac University
Bruce A. White .... Quinnipiac University
Richard L. Cooper .... Quinnipiac University
Steven C. Sohcot .... Quinnipiac University

Service Learning is the process of integratingcommunity servicewith active guided reflection in ways that enhance and enrich student learning of course material, and provides real benefits to the community. Service Learning builds on a tradition of activism and volunteerism which was popular in the sixties but which greatly subsided during the seventies and eighties. But the goal of service learning is to empower those who serve. This is not necessarily the goal of volunteerism, community service, or experiential education. The tradition of volunteer service saw a rebirth in the late eighties as cultural, educational and civic leaders challenged higher education to fulfill its historic mission to promote civic responsibility. Many colleges accepted this challenge and created a support network, to develop and promote Service Learning as a pedagogical strategy. Service Learning is now a national movement and is utilized in the majority of colleges and universities in the Unit...

3112 Sat Nov 6, 8:00, in Rose Island II
Panel

Accreditation From A to Z: A Primer for Institutions Seeking IS Accreditation for the First Time

Robert F. Zant .... Illinois State University
David L. Feinstein ...... Univ of South Alabama
Don Bailes ..... East Tennessee State University
John T. Gorgone .... Bentley College
Bruce A. White .... Quinnipiac University

The Computing Accreditation Commission (CAC) of ABET is in the third full year of accrediting programs in information systems. The panelists have extensive experience on committees dealing with national curricula and accreditation, and have served on the CAC and as accreditation visit team chairs. This panel will discuss the accreditation process from beginning to end. It should interest individuals from institutions that are considering seeking accreditation for the first time and individuals who are interested in volunteering to become program evaluators with the CAC. (1) Initiating the accreditation process. (2) The Self Study. (3) Informing ABET. (4) Preparing for the visit. (5) The visit. (6) Post visit activities. (7) Response to the Preliminary Statement. (8) Accreditation actions.

3122 Sat Nov 6, 8:00, in Vanderbilt Room
Refereed Paper

Development of Interface Feature-based M-Ticket Framework for Air Travel Industry

Hye-Jeong Chun ..... University of West Florida
June Wei .... University of West Florida

The development of user-friendly mobile commerce (m-commerce) environment is crucial to the success of m-commerce. The current research develops a feature based mobile-commerce framework for air travel industry by studying the existing e-ticketing environments. Specifically, seventeen online air travel agencies are examined to find necessary features for online ticketing with a focus on user-friendly features. These features are further classified into three categories to develop a related feature pyramid. These features are crucial to the success of m-ticketing development. Multivariate cluster analysis is also conducted to classify these 17 agencies into 3 groups. The beneficiaries of the findings from the current research are existing on-line travel agencies, future m-ticket travel agencies, and the developers of mobile devices.

3123 Sat Nov 6, 8:30, in Vanderbilt Room
Refereed Paper

Using Enron to Teach the Value of

Integration

James J. Pomykalski ... Susquehanna University

Motivating business students in an Information Systems course is a unique challenge. In this paper, we discuss the use of a case study involving Enron in an IS Theory and Practice course. The case study points out what can go wrong when the business, organizational, and IS strategies within an enterprise are not balanced. Writing assignments as part of the case study are also highlighted.

3124	Sat Nov 6, 9:00, in Vanderbilt Room Refereed Paper

A New tool in IS Management: Geographic Information Systems

Emil Boasson .... Ithaca College
Vigdis Boasson .... Ithaca College
William J. Tastle .... Ithaca College

Geographic Information Systems (GIS) is a relatively new field that is introduced into the IS/IT/MIS environment. This paper defines and places GIS in the academic context of the business school curriculum. Examples illustrate the usefulness and importance of the technology. Although applicable to virtually any business discipline, the emphasis is on the placement in the IS part, but with linkages to finance, strategy, marketing, etc. A case is made for its inclusion into the IS curriculum, albeit it in an elective capacity.

3132	Sat Nov 6, 8:00, in Commodore Perry Refereed Paper

Crafting an Architect-focused MS Program in Information Technology

Donald R. Chand .... Bentley College

This paper presents the design of an MS program in Information Technology (MSIT), whose first entering class arrived in Fall 2001 and graduated in Spring 2003. The purpose of the paper is to share how we crafted an architect-focused program. Specifically, it highlights the need for an Information Systems program whose goal is to prepare systems integrators, discusses the design and content of a curriculum that has an architect focus, and outlines how the MSIS 2000 program model curriculum was molded to meet local needs.

3133	Sat Nov 6, 8:30, in Commodore Perry Talk

A Survey of Student Attitudes: Database Competition NCC 2004

Marcos Sivitanides .... Texas State University
Lissa F. Pollacia ...... Northwestern State Univ
Jack Russell ..... Northwestern State University

This paper analyzes information collected from students who competed in the 2nd annual Database Design and Implementation competition held at the 2004 National Collegiate Conference (NCC) sponsored by the Association of Information Technology Professionals (AITP). The contest proved to be as popular in 2004 as it was in its inaugural year, with over 80 teams representing 60 colleges and universities. Based on the results of the 2003 survey, the questions were refined in 2004 to collect more detailed and varied data. Situational and behavioral data were collected, such as level of comfort of the environment and the computer lab set-up. We also asked students about their perceptions of the clarity of the problem statement, the level of difficulty, and the amount of time available to complete the problem. Demographic data were also gathered to gauge the participants' level of familiarity and experience with the software, the field of database design and implementation, and their ...

3134	Sat Nov 6, 9:00, in Commodore Perry Refereed Paper

Practicing What We Preach: Experiences in Teaching IT Project Management in 30 Days

Ramesh Subramanian ..... Quinnipiac University

This paper discusses in detail the experience of the author in teaching an online graduate course in IT project management. This was the first time that the author had taught this course in the online format. One of the main constraints was that the course was restricted to a duration of 30 days. The author used a "project management approach" to designing, developing and delivering the course. In doing so, the author closely followed most project management principles, but ignored some others due to various reasons. The author explains why this was done, and the consequences of not following all the project management principles in the process of preparing and delivering the course. The paper provides the details of the course, as well as "what went wrong" and "what went right" with the course. Detailed reflections of the author as he went through the various stages of the process are given. The paper concludes with lessons learned from this exercise, which could prove to be benef...

3142 Sat Nov 6, 8:00, in Narragansett Room
Refereed Paper

Use of Online Assessment Tools to Enhance Student Performance in Large Classes

Donald L. Amoroso ....   Appalachian State Univ

This research addresses the use of online assessment tools for large classes. Research has reported an increasing use of technologies for enhancing the learning within large classes. Hybrid classes are those that use both traditional lectures and examinations in conjunctions with online teaching, learning modules, and online assessment tools. This paper addresses the online assessment tool and addresses the question, "Will students perform better using online assessment technologies?" Two hybrid classes, both with student enrollments of 500 students, utilized the online assessment tool by McGraw-Hill called SimNet. Students were assessed four times for Microsoft Office applications and completed a pre-test and post-test online assessment, while also completing three traditional, in-class examinations. Correlation analysis and linear regression was used to ascertain relationships as well as impacts on overall grade. It was found that, when adjusted for sample size, online assessment...

3143 Sat Nov 6, 8:30, in Narragansett Room
Refereed Paper

Can E-learning Replace the Traditional Classroom? A Case Study at a Private High School

Jennelle Irene Spurlock-Johnson .... S Univ N O
Wendy Zhang . Southern University New Orleans
Leetta Allen-Haynes .... Southern Univ N O

E-learning is a form of instruction that uses electronic means, primarily e-mail and the internet. This format precludes direct teacher-to-student interaction as is normally found in the classroom. Learning is completely self motivated. Student must manage their time and complete tasks on their own within the given time frame. Some students are not capable and do not have the required self discipline to learn via the internet. Their learning styles may differ and they may not be able to comprehend information without further explanation from a teacher. The role of teachers in online learning is that of facilitators. They are not there to teach the students, but to simply to act as facilitators. This case study of a private Catholic all-females high school suggests that e-learning may not be able to replace the traditional classroom.

3144 Sat Nov 6, 9:00, in Narragansett Room
Refereed Paper

Pilot Studies Introducing Collaborative and Distance Learning Paradigms in a Residential Environment

Michael E. Battig .... Saint Michael's College
Greta Pangborn .... Saint Michael's College

With the advent of the Internet, several alternative educational paradigms have emerged. Although much has been written to support distance learning and collaborative learning, contextualizing research for the residential, liberal arts college requires first-hand experience. With this premise, several studies were funded by Saint Michael's College to explore the appropriateness of e-learning paradigms

in the context of one particular residential environment. Empirical data is presented along with anecdotal and subjective observations. Three learning paradigms are investigated in this paper: pure-distance, partial-distance, and collaborative learning.

3152 Sat Nov 6, 8:00, in Astor Room
Refereed Paper

Teaching Undergraduates IT Research in a NSF/DOE Sponsored Program

Hsui-lin Winkler .... Pace University
Dennis Anderson .... Pace University

We conducted a faculty-student team (FaST) research project in a joint National Science Foundation (NSF) and Department of Energy (DOE) sponsored program in the summer of 2003. With three students working in a designated research group at the Argonne National Laboratory (ANL), we designed a research project and managed the process for the purpose of teaching undergraduates the skills needed in a professional research environment. Through the process, we identified research skills that can be learned in a short but intense program vs. those that may require continuing efforts and motivation. The project management we applied in structuring and organizing the research program proved to be worthwhile in reaching our pre-defined objectives. This paper describes the research project, the team, the research environment and our assessment of the results.

3153 Sat Nov 6, 8:30, in Astor Room
Refereed Paper

Small Colleges Can Get Big NSF Grants

Jill Gerhardt .... Richard Stockton NJ
Beth Olsen .... Richard Stockton NJ

This paper describes my personal journey from a concept to a successful Computer Science, Engineering and Mathematics Scholarships (CSEMS) grant from the National Science Foundation. It explains the steps taken by a new project director at The Richard Stockton College of New Jersey, a small, primarily undergraduate institution with limited experience and support for grant-seeking. The message is that even in a context of inexperience, a small college can persevere and find ways to compete with the big institutions.

3154 Sat Nov 6, 9:00, in Astor Room
Refereed Paper

Utilization of Robotics in Higher Education

John Drew .... Bridgewater State College
Michael Esposito ..... Bridgewater State College
Christine Perakslis ...... Bridgewater St College

The use of technology in the classroom has evolved from the most primitive to the widespread use of personal computers. One of the trends in technological advancements to enter the classroom is the use of robotics. The relationship between robotics and education spans many years. This paper details Papert's Constructionism theory defining learning as being more effective when students are "constructing" or "doing" activities that are personally meaningful. Research includes assessment of experiences of this method of teaching Information Technology through robotics at such institutions as West Point, Reykjavik University and University of South Florida. Based on the experiences reported at the various institutions, authors conclude with recommendations to Bryant College as the college launches an integration of the utilization of robotic components into the Information Technology curriculum to more effectively introduce students to Information Technology concepts.

3162 Sat Nov 6, 8:00, in Morgan Room
Refereed Paper

Post Implementation Review of an Introduction of WebCT

Douglas Michele ... Eastern Connecticut St Univ
Doncho Petkov . Eastern Connecticut State Univ

This paper describes the process of a post implementation review of WebCT introduction at Eastern CSU. It is based on structured interviews of twenty faculty members and nineteen students who were are using this technology. These interviews were summarized using a software program for processing unstructured text, NVivo. The report analyzes the usage of WebCT among faculty and students within the University, the organizational structures and procedures that were established at ECSU to implement WebCT, its impact on the teaching practices at the university, and shows some problematic areas that the users of WebCT are having, which might be of usefulness to other similar endeavors elsewhere.

3163 Sat Nov 6, 8:30, in Morgan Room
Refereed Paper

SMARTVIEW - An Intelligent Expert System Tool using JAVA and JESS Framework

Samuel E. Sambasivam ...... Azusa Pacific Univ
Chris Davies .... United Kingdom

Valuable sales information in this day and age is a resource that at best is hidden from view, obscured by the volume and unobtainable by the pressures of schedules. This paper deals with the issues of the management processes required to effectively understand and utilise valuable facts as they should be used. SmartView enables users to understand on a priority basis the actions required. The filtering and prioritisation framework comes in the form of expert support modules, embedded into the system that continuously monitors operational data and events from around the business. Response reasoning aids in the process of decision support. The danger here is the system will miss important facts, misconstrued information or over emphasise the importance of lower valued situations. Continuous development ensures the knowledge held by the system evolves with the business. The ever-changing environment must be supported by a flexible design that enables responsive corrective action to u...

3164 Sat Nov 6, 9:00, in Morgan Room
Refereed Paper

Technology Adoption in E-Commerce Education: A Case Study

Yonghe Yan .... DePaul University
Xiaowen Fang .... DePaul University

The success of E-Commerce program depends heavily on rigorous technologies and market orientation. It is important to constantly watch and adopt new emerging technologies in E-Commerce education. This paper presents a case study of the adoption of a new technology, i.e. ASP.NET, for B.S./M.S. E-Commerce curricula at a large graduate school of a Midwest university. A phased strategy for new technology adoption is utilized to adopt the new technology. New technology adoption starts from faculty consensus on a new technology. The new technology is first introduced in advanced graduate electives. When it becomes more mature and instructors have gained sufficient experience, it is offered in a pilot course for undergraduate students. It is finally incorporated into B.S./M.S. E-Commerce curricula after the success of the pilot undergraduate course. The curriculum structure of the e-commerce programs allows us to implement this phased strategy of new technology adoption. The nature of the...

3212 Sat Nov 6, 10:00, in Rose Island II
Panel

Changes to MSIS 2000

John T. Gorgone .... Bentley College
Bruce A. White .... Quinnipiac University

This presentation outlines the proposed MSIS 2006 curriculum and the rationale behind it. The committee held three public meetings to date, one each at AMCIS 2003, ICIS 2003, and AMCIS 2004 to hear about your experiences, successes, failures, and suggested improvements for the MSIS Graduate Curriculum. We have listened to the IS community and have made modifications to the curriculum. The committee has prepared a rough draft of MSIS 2006 Graduate Curriculum model for review and feedback to the proposed changes. The purpose of this fourth meeting is to present the proposed draft changes for your review and comment. The new curriculum recognizes that the existing curriculum is restrictive as

the scope of the IS field grows broader. We need the feedback now in order to prepare a "strawman" draft by the beginning of 2005. We plan a "steelman" draft for August 2005. The publication target is January 2006.

3214 Sat Nov 6, 11:00, in Rose Island II
Tutorial

Taking Advantage of the IS 2002 Assessment Exam Capabilities Offered by the Center for Computing Education Research

John H. Reynolds ...... Grand Valley State Univ
Jeffrey P. Landry .... Univ of South Alabama
Herbert E. Longenecker, Jr. ... Univ S Alabama
J. Harold Pardue .. University of South Alabama

During the past year the Center for Computing Education Research (CCER), a Division of the Institute for Certification of Computing Professionals Education Foundation (ICCP EF), developed an assessment examination with the participation of faculty from over 40 universities. The exam is based simultaneously on the exit skills of the IS 2002 information systems model curriculum, and on its learning units (http://www.is2002.org). On the exam, at least four questions were asked for each higher-level learning unit, and for each sub-skill of the curriculum. Each university defined their course architecture and mapped their learning units to the model curriculum. In the process of doing this, university faculty reflected on their course objectives, and then showed how their objectives related to the national model. Since the CCER exam questions test the learning units, they also indirectly test the students on the course performance of each learning unit. This gave university faculty...

3222 Sat Nov 6, 10:00, in Vanderbilt Room
Refereed Paper

A Longitudinal Study Comparing Undergraduate Student Performance in Traditional Courses to the Performance in Online Course Delivery

Gary Ury .. Northwest Missouri State University

As online instruction has become more prevalent at the college and university level, researchers have attempted to measure the success of these programs through a variety of methodologies, instruments, and sample sizes. A need for continued exploration and study to assure quality instruction has existed as technologies and pedagogies change. The purpose of this study was to compare course performance over time between online and traditional classroom students enrolled in a required management information systems course included in the business school's common professional component and an elementary programming course taught by the Computer Science Department. In both courses, the online delivery method was found to be effective, but performance, as measured by final course grades, showed a significantly lower mean score than students enrolled in traditional sections of the course.

3223 Sat Nov 6, 10:30, in Vanderbilt Room
Refereed Paper

A Comparative Analysis of Undergraduate Information Systems Curricula in Selected Business Schools

Mehmet Ulema .... Manhattan College

This paper provides a comparison of the undergraduate Information Systems (IS) curricula in five business schools (Manhattan College, Iona College, Baruch College, Pace University, and University of Georgia) in the U.S.A. The IS programs in these schools are compared against a well-recognized model curriculum, IS 2002 developed by three leading Information systems associations. The comparison shows that some schools like Manhattan College place little more emphasis on the liberal arts aspect than the other institutions. The comparison also shows that all the institutions used in this study seem to provide similar corresponding courses while the larger institutions offer relatively more courses in their IS programs. Additional courses are typically more advanced courses in the same category. A significant omission observed is that none of the institutions offer a course in the project management category as recommended in the model curriculum IS 2002.

3224 Sat Nov 6, 11:00, in Vanderbilt Room
Refereed Paper

Implementation and Management of an Information Systems Practicum in a Graduate Computer Information Technology Curriculum

Samuel S. Conn .... Regis University

This paper reports on the implementation and management of an Information Systems Practicum used in a graduate Computer Information Technology program. The Information Systems Practicum provides a student with an 8 month learning experience that is academically rigorous, intellectually challenging, and which serves as a culminating experience to the student's coursework. Specifically designed around an action research methodology, the Information Systems Practicum engages the student as a practitioner and provides real work opportunity congruent with the course of study. Implementation and management strategies, as well as the educational and philosophical foundations of the Practicum, are investigated along with providing conclusions about the program drawn over a 4 year period of time.

3225 Sat Nov 6, 11:30, in Vanderbilt Room
Refereed Paper

A System for Teaching MIS and MBA Students to Deploy a Scalable Database-driven Web Architecture for B2C E-Commerce

Alexander Y. Yap .... Elon University
Claudia Loebbecke .... University of Cologne

The growing need for real-time information and interactive online feedback has shifted the thrust of web development from static websites to dynamic database-driven web applications. 'E-Commerce capable' or 'transaction-capable' websites are naturally database-driven due to the simple fact that transaction-related information (customer and order information) needs to be captured or entered into a database. Although database-driven web applications are seen as solutions for automating online transaction processing, optimizing business processing, and improving online customer relations management, Internet statistics reveal that a substantial majority of websites on the Internet are not E-Commerce capable or transaction-capable, and nor are they dynamically scalable in terms of content. To understand how technology is an extension of corporate strategy in the 21st century, it is vital that MIS and MBA students have a certain level of knowledge about how e-commerce systems actually a...

3232 Sat Nov 6, 10:00, in Commodore Perry
Refereed Paper

Information Systems Forensics: A Practitioner's Approach

Christopher Malinowski   Long Island U CW Post

No abstract.

3233 Sat Nov 6, 10:30, in Commodore Perry
Refereed Paper

Guidelines on Selecting Intrusion Detection Methods in MANET

Yi Li .... University of West Florida
June Wei .... University of West Florida

Applications of Mobile Ad Hoc Networks (MANET) are increasing in practice; however, MANET is venerable to attacks due to its mobile and ad hoc natures. The security issue is becoming a major concern and bottle neck in the applications of MANET; therefore, selections of intrusion detection methods are especially important for MANET applications. In the current paper, an overview of existing IDS for MANET is conducted based on reviewing features, security issues and requirements of MANET for intrusion detection systems (ISD). A comparison study is conducted to compare existing intrusion detection methods based on inputs, outputs, processes, advantages and disadvantages. Some guidelines are also proposed in selecting intrusion detection methods. The results of the current research are useful for educational and industrial professionals who are interested in information systems security in the wire-

less world. This paper also presents a case study of a MIS/CIS/CS curriculum on the first...

3234 Sat Nov 6, 11:00, in Commodore Perry
Refereed Paper

NSA Centers of Excellence in Information Assurance Education and the Certified Information Systems Security Professional Domains: How Do They Compare?

Albert Fundaburk .... Bloomsburg University

This research collected data from 321 faculty members from universities designated as National Security Agency Centers of Academic Excellence in Information Assurance Education to determine the extent these universities are teaching the areas identified in the 10 domains of the Certified Information Systems Security Professional examination. This question was answered by a researcher developed survey which was confirmed valid using a panel of 18 Certified Information Systems Security Professionals and reliable using Cronbach's Alpha and Split-Halves reliability. The findings of this research indicate that the areas identified in the 10 Domains of the Certified Information Systems Security Professional examination are being taught from a high of between often and always to a low of between sometimes and rarely.

3235 Sat Nov 6, 11:30, in Commodore Perry
Refereed Paper

Reconciling Principle and Practice in a LAN Course: A Simulation and Lab Mixed Approach

Tao Li .... Azusa Pacific University
Samuel E. Sambasivam ...... Azusa Pacific Univ

Teaching Local Area Network (LAN) may need a balance between LAN principle and LAN practice. The important principles of LAN are mostly embedded in the physical (PHY) layer and the MAC layer. MAC and PHY protocols are integrated in VLSI chips and are not accessible to ordinary users. Without a good understanding of the principle, students may not learn much about LAN. So it is crucial that a LAN course strike a balance between principle and lab practice. We present such an approach to teaching LAN, using a combination of lectures, simulation tools and lab experiments. This approach gives students both a good understanding of the LAN protocols and the use of LAN in today's data networking.

3242 Sat Nov 6, 10:00, in Narragansett Room
Refereed Paper

Weblogs and Student-Centered Learning: Personal Experiences in MBA Teaching

W. Paul Forster .... Hong Kong U Sci Tech
Tony Tam .... Hong Kong U Sci Tech

This paper uses the lens of Gibson's concept of affordances to explore how weblogs might encourage student-centered learning. It discusses the authors' personal experiences using weblogs in the context of an MBA-level course as course weblogs and as a case discussion weblog. Practical matters in improving the use of weblogs in the classroom, and how the affordances of weblogs are constrained by the institutions of teacher-centered learning are discussed.

3243 Sat Nov 6, 10:30, in Narragansett Room
Refereed Paper

A Study Of Course Management Software Features

Kai S. Koong .... Univ Texas Pan Amer
Lai C. Liu .... Univ Texas Pan Amer

Educational institutions and businesses do have a variety of course management software to select from for developing and deploying distance delivery programs. For this reason, selecting the one course management software for implementation can be quite a task for the end-user because these products can be quite different in their operating capabilities, systems requirements, and cost structures. This study examines the operating capabilities of

selected course management software. Specifically, this research identifies the different types of components and their associated tools that are available in popular course management software packages. Selected observations about needed systems requirements for implementing the software and their cost structures are also reported.

3244 Sat Nov 6, 11:00, in Narragansett Room
Talk

Service Learning: Albert Schweitzer's Institute at Quinnipiac University

Richard L. Cooper .... Quinnipiac University
Steven C. Sohcot .... Quinnipiac University

The following is an overview of what four sophomore college students attending Quinnipiac University did in their Computer Information Systems class: Systems Analysis and Design (CIS 370) which revolves around the concept of Service Learning. Each group member brought unique skills from outside the class to help develop a plan to promote this organization, as well as fulfill it. This paper is a reflection of how the students were involved, how the service learning component complimented the course, how the project benefited the Albert Schweitzer Institute, and how the entire University benefited.

3245 Sat Nov 6, 11:30, in Narragansett Room
Refereed Paper

Systems Architecting of IS Support for Learning Organizations: The Scenario-Based Design Challenge in Human Activity Systems

Kam Hou VAT .... University of Macau

This paper investigates the architecting of information systems (IS) support for learning organizations through the elaboration of typical organizational scenarios for knowledge work. Specifically, our discussion is based on the belief that the design issues of IS support must be situated in the context of social processes in which, in a specific organizational scenario, a particular group of people can conceptualize

their knowledge work and hence the purposeful action they wish to undertake. This provides the basis for ascertaining what information support is needed by those who undertake that action, and how modern information technology can help to provide that support. The paper describes our initiatives in systems thinking to substantiate IS education in terms of expositing the importance of soft systems methodology (SSM) in the process of IS design according to the evolving contexts of human activity systems. To realize the various IS services in a learning organization, whos...

3252 Sat Nov 6, 10:00, in Astor Room
Refereed Paper

Assuring Information Systems' Effectiveness Through Data Integrity: Essential Guidelines For Information Systems Databases

Eghosa Ugboma .... Florida Memorial College

This paper discusses data integrity and how it assists in making information systems reliable systems. The paper also shows that data integrity is one of the primary means of establishing, enforcing, and ensuring the effectiveness of information systems. In addition, the paper addresses the different categories of data integrity that help in ensuring information systems' effectiveness. This class of effectiveness is implemented through information systems databases. Information systems facilitate both the distribution of information (information sharing) and decision-making practices to accomplish users' goals. Information systems are used to (a) fulfill users' information needs, (b) control organizations current activities, and (c) predict future management expectations. The reliability of information systems is in most part controlled by the databases from which the systems' information is generated. The databases on which information systems rely must have integrity for the in...

3253 Sat Nov 6, 10:30, in Astor Room
Refereed Paper

Information Systems Ethics in Oman, South Korea, and the USA

Thomas S. E. Hilton ... U Wisconsin Eau Claire
Se Hyung (David) Oh .. U Wisconsin Eau Claire
Husain Al-Lawati .... Central Bank of Oman

A 30-item, three section IS ethics questionnaire was completed by a convenience sample of 520 bank employees, 129 in the western USA, 176 in the Sultanate of Oman, and 215 in the Republic of South Korea. Section 1 concerned employee use of employer IS resources for personal entertainment, section 2 concerned employee use of employer IS resources for personal gain or the gain of family or friends, and section 3 concerned employer monitoring of employee use of employer IS resources. ANOVA yielded statistically significant differences among the samples on 28 items in all three sections; 14 of these represented differing degrees of commitment but overall agreement on the ethicality of the behavior described; 12 represented actual disagreement as to whether a behavior was ethical or not. Of the 12 actual disagreements, 6 were in section 1 and concerned after-hours use of IS resources, 2 were in section 2 and concerned printing and storing personal documents, and 4 were in section 3 and ...

3254	Sat Nov 6, 11:00, in Astor Room
	Refereed Paper

Integrating Ethics into the Curriculum: A Case Study on Developing an Ethics Colloquium

Julie Jensen .... Luther College
Charles Christianson .... Luther College
Rob Larson .... Luther College
Ramona Nelson .... Luther College
Wade Shilts .... Luther College

Business ethics is certainly not a new topic, but highly publicized corporate scandals have renewed the call for ethical decision-making in the business world. Colleges and universities are being challenged to better prepare future business leaders for ethical decision-making. The purpose of this paper is to share how the Economics and Business Department faculty from a small, liberal arts institution explored one model for integrating ethics education into the department curriculum. A team of department members explored ethics programs at other institutions and researched models for integrating ethics into the curriculum. Using ideas from their research the faculty team created an ethics colloquium that could be effectively piloted within the current department structure and curriculum. This paper describes the structure of the colloquium, student reflections on the benefits and suggested improvements for the course, and lessons learned by the faculty team that facilitated th...

3255	Sat Nov 6, 11:30, in Astor Room
	Refereed Paper

IS/CS Accreditation: The Ethics Component

Ronald J. Kizior ..... Loyola University Chicago
Robert F. Zant .... Illinois State University

This paper presents the results of a survey on the ethical component of the accreditation process for IS programs conducted in 2001 and 2002. We contacted those institutions who had recently gone through the accreditation process in order to determine any trends in the evaluation of the ethics component of the accreditation criteria. We were interested in determining what, if any, common experiences were shared by the universities during their recent accreditation process, and, hopefully, pass on to the readers any suggestions to universities who may be going through this accreditation process in the future.

3262	Sat Nov 6, 10:00, in Morgan Room
	Refereed Paper

Mechanism Design for Peer-and-Self Assessment to a Group Project

Yanbin Tu .... University of Connecticut
Min Lu .... University of British Columbia

Teamwork is becoming more and more important in IS professions. A group project assignment is an effective method to train students' skills in teamwork. To reduce the free-rider problem and treat each group member fairly, the instructor needs to distinguish each individual's contribution to teamwork. In the paper, we analyze one commonly used

peer-and-self assessment approach and point out its critical drawback: the deduced ranking might be wrong as some members do not tell the truth. Alternatively, we propose an effective mechanism to modify the peer-and-self assessment. The advantage of the revised peer-and-self assessment is that under the new mechanism, truth-telling is each individual's dominant strategy. Therefore, by using the revised peer-and-self assessment, the instructor can effectively distinguish each member's contribution to teamwork.

3263 Sat Nov 6, 10:30, in Morgan Room
Refereed Paper

Achieving an Effective and Successful IS Group Project

Yanbin Tu .... University of Connecticut
Yanlin Tu .. Shanghai Yangjing-Juyuan Exp Sch

A group project plays an important role to train information systems (IS) students' skills in teamwork. However, an effective and successful group project is not straightforward. In this paper, we summarize some teaching tips to achieve an effective and successful group project. In the preparation stage, the instructor should choose a suitable topic and form a reasonable team. In the execution stage, the instructor should try to align the student's time-skewed behavior; in some circumstances, adjustment of topics and team members is needed. Students' separating the group project into several independent and isolated individual works should also be avoided. Additionally, some mechanisms are required to reduce the free-rider problem in a group project. In the assessment stage, the instructor should not only evaluate the overall project, but also accurately distinguish each member's contribution. In the post-assessment stage, revision of a group project, which is commonly ignored, sho...

3264 Sat Nov 6, 11:00, in Morgan Room
Refereed Paper

Establishing Computer User Groups in a Metropolitan Area

Robert F. Roggio .... University of North Florida

The greater part of technological activity takes place in large cities and towns. It is in these metropolitan areas therefore that there will be a wide spectrum of users using a variety of software tools and applications. Frequently, a positive approach to mastering a software product is to speak to and work with other users. Users often want to learn about products, share their enthusiasm for a product and discuss ways to better use the product. Many users prefer the "users group" atmosphere (Cahoon 1996). Within users groups, Special Interest Groups (SIGs) are sometimes formed to specialize on more complex or popular components of the software. The North Florida Rational Users Group (NF-RUG) was established in March 2003 for users of the IBM-Rational family of software development methods and tools. This paper provides a brief background on user groups, the general structure of a user group, membership benefits, and models valuable lessons learned relating to the successful...

3265 Sat Nov 6, 11:30, in Morgan Room
Refereed Paper

Teaching the Blind to Program Visually

Robert M. Siegfried .... Adelphi University
Denis Diakoniarakis .... Adelphi University
Uchechukwu Obianyo-Agu ... Adelphi University

The proliferation of graphical user interfaces has had a dramatic impact on the ability of the blind to work as programmers. It is particularly difficult for the blind to design forms for programs written in Visual Basic. A prototype scripting language is introduced that enables the blind to create Visual Basic forms without the need to specify all the detailed information that Visual Basic requires and without the "point and click" approach that the blind cannot use. The syntax for the language is described and plans for expanding the language are discussed.

3412 Sat Nov 6, 3:00, in Rose Island II
Refereed Paper

Cyber Terrorism: A Clear and Present Danger to Civilized Society?

Gaurav Jain .... Bryant University

As today's information security professionals, both in private and public organizations, work towards learning and countering the threats posed by destructive viruses and worms; Distributed Denial of Service exploits; and intrusions to disrupt vulnerable systems, there is another major threat of "cyber terrorism" that is looming around the corner. Primarily targeted at government agencies and private companies, cyber terrorism acts are aimed towards high-value targets such as networks that control critical infrastructures. Combined with physical acts of terrorism, cyber exploits can cause widespread disruption and destruction. This paper highlights the thinking and rationale behind the cyber terrorism and lists some of the recent cyber terrorism acts. It next discusses the level of vulnerability faced by major government agencies and corporations when it comes to cyber terrorism and what actions are currently in place and are being taken by these entities to prepare for such an ac...

3413 | Sat Nov 6, 3:30, in Rose Island II
Refereed Paper

Design and Implementation of an Information Security Model for E-Business

Ghasem S. Alijani .. Southern Univ New Orleans
James E. Christy ... Southern Univ New Orleans
Hugh Craft ... Southern University New Orleans
Peter Mok . Southern University at New Orleans
J. Steven Welsh .... Southern Univ New Orleans

One of the foremost small businesses security concerns is the protection of critical information, both within their internal financial infrastructures and from external elements. Studies show that most cyber-attacks occur inside organizations, instigated by personnel with valid access to the system. This paper describes the design, implementation, and testing of a security system that enhances the capability of small businesses to protect information within the boundary of their networks. Within a specified network, database and transactions are encrypted, decrypted, and processed by the Internal Control and Employee Agents. The database was

clustered and access method was provided to employees using private keys. The test results indicate that this additional security layer provides a simple solution to the data sharing and transition within an organization's network. The results of this study will be of significance to owners, managers, and the security personnel responsible ...

3414 | Sat Nov 6, 4:00, in Rose Island II
Refereed Paper

An Implementation of IS2002: BSCIS'04 - Bentley College

Leslie J. Waguespack, Jr. ...... Bentley College

IS undergraduate curricula design remains a consummate challenge for business school faculty around the world. IS 2002 guides the way by providing philosophy, focus and discussion for curriculum designers attempting to provide the best possible preparation for IS graduates who will compete in a global marketplace. This paper briefly describes the result of applying the guidance of IS 2002 to the design of an actual IS curriculum at Bentley College, Massachusetts, USA. We describe the balance we attempt to strike between breadth and depth of technical and business education goals in our BSCIS'04.

3415 | Sat Nov 6, 4:30, in Rose Island II
Refereed Paper

An Alternative Approach to Technology Infrastructure Presentation within the IS2002 Model Undergraduate Curriculum

Irv Englander .... Bentley College

Modern computer systems are characterized by distributed computing, with multiple computer facilities and other digital resources connected together and integrated using network and Internet technology. The IS2002 undergraduate curriculum treats computer technology and networking as separate entities within a three-course Technology Infrastructure area. In this paper, we consider the reorganization of the material in the IS2002 technology infrastructure courses into a sequence of two new courses

that reflect modern computer system architectural design. In our reorganization, the new courses incorporate nearly all of the material from the original IS2002 computer technology and networking courses, plus selected material from the third course, along with new material reflecting recent developments that are covered sketchily or not at all in the IS2002 model. The material is to be presented with an emphasis on system architecture, integration, and interaction, with computer technolog...

3422 Sat Nov 6, 3:00, in Vanderbilt Room
Refereed Paper

A Method of Measuring Fitness of Learning Tasks to Blackboard Technology

Richard Orwig .... Susquehanna University

Research in Information Systems task/technology fitness has largely assumed that the business task is well-defined. This research demonstrates that even a simple task such as "Complete an IT Project Management Course" can be defined with great ambiguity among students. Thirty-three students were assigned to identify and define activities associated with completing a semester course. Their resulting models were merged to comprise a super-list of sixty-nine unique activities. Cumulatively, this defines the tasks associated with learning the material of the course. The functions of Blackboard Version 5, a technological learning environment, were identified and mapped into each task. The resulting many-to-many mapping demonstrates the complexity of attempting to determine the degree of fitness of a technology such as a Blackboard learning environment to a "simple" task as completing an IT Project Management course. We refer to the gap between the task definition and the system f...

3423 Sat Nov 6, 3:30, in Vanderbilt Room
Refereed Paper

Providing and Evaluating Instructional Multimedia Institutes for Science, Mathematics and Technology Educators

Donna Tupper .... CC Baltimore Essex
Andrew Beiderman .... CC Baltimore Essex
Sylvia Sorkin .... CC Baltimore Essex
Todd Abramovitz .... CC Baltimore Essex
Marianne Cinaglia .... Rowan University

This paper describes a series of two-week summer institutes for college faculty and secondary school teachers of mathematics, science, and technology. National Science Foundation funding provides stipends for forty educators to learn how to use several website development, screen capture, and multimedia software packages. Participants create interactive Multimedia Learning Activities for use in their classes, and agree to attend two-week institutes in two consecutive summers.

3424 Sat Nov 6, 4:00, in Vanderbilt Room
Refereed Paper

A Comparative Analysis of Program Curriculum in Selected Distance Education Information Systems Programs

Frank Cervone .... Northwestern University

A traditional indicator of quality in an educational program has been the curriculum offered in the program. One means for making a quality comparison between on-campus and distance learning programs would be to study the curriculum offered in a distance education program and compare it to a standardized, model curriculum. This study seeks to determine whether conformance of curriculum to a standardized model can be used as an indicator of program quality in distance education programs. By analyzing the curriculum in several Information Systems (IS) programs offered through Internet-based distance education, the current study attempts to determine whether conformance of curriculum to a standardized model, such as the MSIS 2000 Model Curriculum, can effectively be used as a determining indicator of program quality.

3425 Sat Nov 6, 4:30, in Vanderbilt Room
Refereed Paper

Issues in Measuring Time to Teach

Information Systems Online

Gregory W. Hislop .... Drexel University
Heidi J. C. Ellis ..... Rensselaer (RPI) Hartford

During the past decade, the use of online education to deliver information systems courses and even entire degree programs has increased significantly. One result of this growth in distance education is that an increasing number of faculty members are being asked to teach an expanding number and variety of courses in an online format. The time required to teach an online course impacts scheduling, course delivery costs, and faculty incentive to teach online. Therefore, a precise assessment of the time required to teach online is necessary in order to accurately plan and motivate faculty. However, most studies on time to teach online are survey-based or anecdotal in nature. There is little research on faculty effort based on measurement of time, as the quantitative measurement of faculty effort is a difficult task. This paper discusses the issues involved in measuring the time required to teach a course online as compared to traditional, face-to-face delivery. It examines recent r...

3432 Sat Nov 6, 3:00, in Commodore Perry
Refereed Paper

Redesign of Introduction to Computers Course

Patrick D. Mackin .... Black Hills State Univ
Jean L. Johnson .... Black Hills State University
Sharon Paranto ...... Northern State University

This paper describes the development of a "flexibly-structured" paradigm for teaching an Introduction to Computers course. In the new teaching methodology, students use a self-paced approach, with pre-assigned dates for lectures and for assignment and exam deadlines. By utilizing online testing, undergraduate lab assistants and tutorial style texts, the course has been redesigned in such a way that motivated students are able to complete the course early, which leaves more time to assist those students who are struggling. Feedback so far has indicated increased student satisfaction, while at the same time saving money due to reduced faculty loads. This flexibly-structured paradigm better addresses the problem that most faculty are encountering - students entering computer courses with a wider range of computer skills from the true beginner who has no experience using a computer to those students who have developed skills beyond an introductory course level. The paper discusses...

3433 Sat Nov 6, 3:30, in Commodore Perry
Refereed Paper

Assessment and Development of Prior Knowledge for IS Learning Effectiveness: Reflections on Practice

Nelly Todorova .... University of Canterbury
Annette Mills .... University of Canterbury

Ramsden (1992) suggests that excellence in teaching requires constant attention to how a subject is being understood by students and the ability to use the assessment to change instruction so that it more accurately addresses student's errors and misconceptions. This paper is therefore premised on the need to more accurately understand what students know about a subject (prior knowledge), to enrich their prior knowledge and to use this understanding to inform teaching. Based on an extensive literature review, an iterative learning model is introduced which incorporates this process of enrichment, evaluation and activation of prior knowledge on a particular subject or learning unit. The paper also reports on the adoption of the model in a first year introductory IS course and concludes with teacher reflections on the use of the model and suggestions for further work.

3434 Sat Nov 6, 4:00, in Commodore Perry
Refereed Paper

Empowering Freshmen with Technology Skills: A Security Check Approach

William VanderClock .... Bentley College
John T. Gorgone .... Bentley College

When freshman enroll in Fundamentals of Information Systems (IS 2002.1) or Personal Productivity

with IS Technology (IS 2002.PO), they have the same attitude as for any other required course: Why am I here? Why do I need to take this course? This paper presents one way in which to change this attitude and, at the same time, teach students about how to use their computer. Freshmen download "stuff", lots of stuff, from the Internet to their computer. Over time, they become paranoid as they encounter hostile spyware, viruses, and worms. They recognize that they need technology skills to be able to maintain and protect their own machine. This paper outlines a strategy for getting freshmen involved in learning about the technology by helping them to overcome their fears. The intent is to capture their interest in information systems by providing the know how to cope with computer software maintenance, Spyware, viruses, worms, Windows updates, disk defrag, disk check and Windows disk c...

3435 Sat Nov 6, 4:30, in Commodore Perry
Refereed Paper

Clarifying Computing Study Choices for the Student

Randy M. Kaplan .... Drexel University

Our discipline and profession faces a tremendous challenge. On the one hand we find that fewer students are enrolling in our programs over the last several years. Part of this trend can be attributed to the dot com failures of the late '90s and part can be attributed to the media's current infatuation with outsourcing of technical jobs. On the other hand the number of courses of study that are available as choices to high school students in the computing professions has grown from a single choice (computer science) to seven or eight different courses of study. Most laypersons understand a career in computing to be "computer science." If you are in "computer science" there is a general belief that the primary job duty will be programming. Programming is not viewed as a very positive career choice due to the current perceived outsourcing trends. For that reason it behooves us to explain to prospective students what their study and career choices can be in computing in a way tha...

3442 Sat Nov 6, 3:00, in Narragansett Room
Refereed Paper

Introduction of Human Computer Interaction in Modern Education

Nicholas A. Vonada ... Pennsylvania State Univ

The concept of HCI (Human Computer Interaction), in Adult Education is going to have a major impact on how adult learners are trained in the future. This paper will define HCI and present and introductory overview of the information in layman terms. This paper will give some of the history behind HCI, future developments in the area of HCI, content information of what HCI, example of designing HCI education, how it affects social aspects of both education and in the industry. Discuss how HCI can be effective in training children in early education and adults in continuing education. How best to come to terms with Social Constructivism and how it will best fit into the scheme of modern education and its impact on the future of education.

3443 Sat Nov 6, 3:30, in Narragansett Room
Refereed Paper

A Study Of Web Services Strategy In The Financial Services Industry

Dennis Anderson .... Pace University
Hortense Howell-Barber .... Pace University
Jonathan Hill .... Pace University
Nasir Javed .... Pace University
James Lawler .... Pace University
Zheng Li .... Pace University

Web Services continues to be an important area of adoption by business firms. This study analyzes the critical factors that contribute to an effective Web Services strategy. Focused on an analysis of key firms in the financial services sector, the study examines in a best practices survey, confirmatory detailed case studies and statistical interpretation the significance of technological, methodological and business factors that have enabled success in the initial strategies of these firms. The findings impute that firms in the financial sector which lead e-Business

Web Services projects with a focus on business factors have higher success in strategy than firms in this sector that lead with technological functionality. This study contributes new insight into the effective implementation of Web Services strategy and is appropriate as a beginning framework for financial service and other business firms exploring further investment in Web Services in order to integrate their core...

3444 Sat Nov 6, 4:00, in Narragansett Room
Refereed Paper

Whatever Happened to Y2k? Using a Premier Crisis Management Prototype to Study Post 9/11 Preparedness

Elia V. Chepaitis .... Fairfield University

Few topics interest students as much as emergency prevention and preparedness, particularly since the release of the 9/11 Commission's recommendations in the summer of 2004. This paper describes how the Millennium Crisis can be used to add models, linearity, context, research directions, and depth in this area. The author examines the pedagogical relevance of the features, impacts, contextual analysis, research opportunities, and lessons of the Y2K experience in emergency management discussions. The Year 2000 crisis was a unique maintenance problem, not only of lasting importance for the information systems profession, but also for economic, socio-cultural, and political impacts. Invaluable lessons can be gleaned from this ubiquitous, temporal, costly, and successful campaign. The $600 billion debugging regime was a milestone achievement in information systems, and also provides a contemporary opportunity for critical analysis in fecund research areas: the economic impacts of ...

3445 Sat Nov 6, 4:30, in Narragansett Room
Refereed Paper

Moving Past Gantt and PERT - Reinforcing Metrics as a Management Tool for CIS Students

Brenda McAleer ... University of Maine Augusta

Joseph Szakas .. University of Maine at Augusta

Courses in Computer Information Systems programs need to stay current with technological change and its resulting progress. Computer Information Systems students not only need to keep their computer knowledge up to date, but also understand how the application of this knowledge is used within their work organizations. Courses in supporting disciplines must also ensure that Computer Information Systems students stay current in those fields. Project management metrics from an Information Technology perspective are covered in a number of Computer Information Systems courses. The inclusion of a discussion of metrics in a Principles of Management course would reinforce the use of metrics from a manager's perspective.

3452 Sat Nov 6, 3:00, in Astor Room
Refereed Paper

Weaving Experiences from Software Engineering Training in Industry into Mass University Education

Wolf-Gideon Bleek .... University of Hamburg
Carola Lilienthal .... University of Hamburg
Axel Schmolitzky .... University of Hamburg

Basic software engineering education is an important part of IS education. This paper shows and critically discusses how experiences gained from years of software engineering training in the industry can be transferred to mass university education. The approach relies on cyclic, iterative, and problem based learning and puts equal stress on technical skills (such as object-oriented and database programming) and on soft skills (such as presentation techniques, handling personal conflicts and cooperating in a team).

3453 Sat Nov 6, 3:30, in Astor Room
Refereed Paper

Outsourcing? Offshore? Students Need to Know

Antonio M. Lopez, Jr. ... Xavier Univ Louisiana

Since the collapse of the "dot com" boom, there has been significant media attention given to outsourcing and the migration of information technology jobs off-shore. Unfortunately, the story headlines and news sound bites have, for the most part, been less than precise. Some believe that this is contributing to the enrollment drops in the computing disciplines. This paper seeks to put overused terms such as outsourcing and offshore into proper perspective with respect to computing disciplines. It is intended to help faculty guide prospective U. S. college students to the realization that a degree in a computing discipline is very advantageous in many different career fields.

3454	Sat Nov 6, 4:00, in Astor Room Refereed Paper

Operations Research and the Information Systems Curriculum

Greta Pangborn .... Saint Michael's College

The current boom in information technology and the corresponding wealth of data available to management would seem to make quantitative data analysis techniques more essential than ever. This paper includes discussion of how a number of operations research techniques including mathematical programming, simulation, yield management, dynamic programming, network algorithms, and statistics might be incorporated into the information systems curriculum.

3455	Sat Nov 6, 4:30, in Astor Room Refereed Paper

Case Studies in Programming and System Courses

Donald K. Hsu .... Dominican College

The year 2001, 2002, and 2003 experienced significant downsizing of the Information Technology (IT) industry. In 2004, outsourcing or off-shoring gave another blow to the IT job market. The future enrollment of computer science, computer information system, management information system majors might decrease. Most of us, the faculty who presented papers at the ISECON conferences, will have fewer students to teach if this trend persists. Our jobs may be on the line. How do we ensure the content we teach, will continue to be relevant to the need of the industry? This paper tries to provide answers by examining the use of case studies in Programming and System courses.

3462	Sat Nov 6, 3:00, in Morgan Room Refereed Paper

Teaching and Learning Outside the Box and the Proposed Soft-Side of Teaching Model

Leslie Leong .... Central Connecticut State Univ

Traditional teaching methods have been tested, examined and many have been published in a variety of disciplines. However, newer paradigms of teaching have evolved due to the availability of technology that is implemented in many educational institutions. Besides adopting technology as a means to teaching effectiveness, the soft-side' of teaching are apparent among the more educated and more knowledgeable learners. Teachers are transforming from a figure-head' to a participant.' This study discussed the newer technology to be utilized in the classrooms and proposed a soft-side' teaching model for the new' effective teacher in the 21st century. Teaching and learning outside the box are discussed.

3463	Sat Nov 6, 3:30, in Morgan Room Refereed Paper

Measuring Innovation: A Comprehensive Audit

Michael J. Salé .... Bridgewater State College
Robert M. Wolk ...... Bridgewater State College

The purpose of this audit is to evaluate the innovative capabilities of an information technology department at a higher education institution. This audit is based on theory, industry standards, and external research sources compared against the current practices of the institution. In the framework of the audit and as with any other audit, a question is

posed pertaining to innovative capability and a standard or point of comparison is stated. At this point in the audit, evaluator(s) should note what evidence the institution is or is not showing for the demonstration of this standard. In this audit, the audit on Bridgewater State College is presented. The results from the audit of Bridgewater State College is included to give the student guidelines on what types of evidence should be exhibited. However, this by no means should limit the breadth of the analysis on any particular institution or criteria. At the conclusion of the audit, suggestions for improvement and recommend...

3464 | Sat Nov 6, 4:00, in Morgan Room
Refereed Paper

Do Students Receive Adequate Training in HCI Field?

Isaac J. Gabriel .... Nova Southeastern Univ

There are millions of web applications and systems developed and used today. However, the majority of them have significant usability flaws. Given the exponential growth of the web, there is a possibility of us facing a web usability crisis. In order to avoid it, significant improvements in usability of web sites are needed. Therefore, more skilled HCI (human-computer interaction) specialists are needed. In addition, educating developers, designers, and their supervisors in HCI will also improve the situation. However, do we adequately educate IT (information technology) professionals in HCI? A study was conducted to analyze curriculums of US graduate-level IT-related master programs and to determine whether students receive adequate training in HCI field. The results of this study are discussed in the article.

3465 | Sat Nov 6, 4:30, in Morgan Room
Refereed Paper

Creating an Outcomes Assessment Instrument that Incorporates Information Technology Dimensions

Robert M. Wolk ...... Bridgewater State College

An outcomes assessment instrument was created to measure student satisfaction in overall program content and specific skill levels at a four year college business degree program. The instrument includes a scale that measures student perceptions of effective teaching methods. Within the instrument are questions that can be used to measure information technology dimensions of computing availability and student perceptions of their own computing and information technology skills. Effective teaching methods measured include spreadsheet analysis, Internet based assignments, the use of PowerPoint, and the use of instructional technology.

4112 | Sun Nov 7, 8:00, in Ballroom B
Refereed Paper

Development of Assessment Portfolios for IS Majors

Nelly Todorova .... University of Canterbury
Annette Mills .... University of Canterbury

While assessment is acknowledged as a critical enabler of student learning, literature shows lack of alignment between learning objectives and the types of assessment used in practice. This paper reports on the findings of education and IS literature in order to define and evaluate the role of assessment in promoting higher learning objectives for Information Systems majors. The paper recommends a four stage approach to the evaluation and development of assessment portfolios for IS education. The discussion closes with recommendations for future research.

4113 | Sun Nov 7, 8:30, in Ballroom B
Refereed Paper

A User-Acceptance Evaluation of Two Web-based Computer Programming Teaching Tools

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

Learning computer programming through an online course is inherently difficult. This study presents results from the evaluation of two online tools that

can be employed in teaching an online computer-programming course on structured programming. One of the tools, PROGSIM, allows code execution in a trace-like mode on the client's browser, while the other implements a question-answer system that allows students to self-test their comprehension of programming code semantic, and not just syntax. Using the Technology Acceptance Model, the two tools are compared to traditional online text-only instruction. Results are presented and discussed.

4114 | Sun Nov 7, 9:00, in Ballroom B
Refereed Paper

Business Students Sharpen C# Programming Skills with Visual Studio Tools for Microsoft Office

Jerry M. Chin ... Southwest Missouri State Univ
Sheryl Brahnam . Southwest Missouri State Univ
Mary H. Chin ... Southwest Missouri State Univ

In October of 2003 Microsoft released a new application package to create project templates for document-centric solutions for the host applications Word and Excel. Using Microsoft Visual Basic or C#, code modules can be created in much the same way as using Visual Basic for Application (VBA). This paper discusses the development of a C#/Excel student assignment. In addition, this paper provides a systematic view of the relationships between source modules, internal data structures, and the worksheet.

4122 | Sun Nov 7, 8:00, in Ballroom C
Refereed Paper

Tools for Hybrid Instruction - Classroom and Distance Instruction in Synchronous and Asynchronous Modes

John Sigle ..... Louisiana State Univ Shreveport
Jeff Key .... Louisiana State Univ Shreveport
Adrienne Critcher ...... Louisiana St Shreveport
Jamie Prince .. Louisiana State Univ Shreveport

Higher education in this country must evolve in order to meet the learning needs of students that have difficulty acquiring degrees due to the scheduling and geographical constraints of the traditional classroom. Current approaches to this challenge are known collectively as "distance learning" and include web based education which often consists of reading assignments and online discussion groups and/or compressed video ("talking heads.") Many sacrifices have been made to traditional instructional techniques in order to adapt to the constraints of current hardware, software, and bandwidth. With the availability of higher bandwidth and faster computers we have the potential to restore many of the positive attributes of the traditional classroom environment to "distance learning." We believe that the natural evolution for delivery of instruction is to a hybrid mode in which the regular classroom experience is made available to distant students as well as those in the classroom a...

4123 | Sun Nov 7, 8:30, in Ballroom C
Refereed Paper

FD-EXPLORER: A Pedagogical and Design Tool for Functional Dependency Exploration

Julian M. Scher ... New Jersey Institute of Tech
Canghui Qiu .... New Jersey Institute of Tech

Functional dependencies are merely a type of relationship between attributes in a relation, or, alternatively, may be viewed as constraints on attributes, but their importance in the optimal design of databases is enormous. Normalization of a database, and the decomposition of relations, are totally dependent upon the database designer being able to identify functional dependencies, and manipulate them. Curricula in CS, IS and IT will almost always include a course in database design, with functional dependencies being a key topic in such a course. FD-Explorer is a new tool we have developed which enables both the student of database design, as well as professional database developers, to define a known set of functional dependencies on a relation, deduce new sets of functional dependencies, compute closures of individual attributes and the set of functional dependencies, and identify superkeys. This software tool, which we ultimately intend to make freely available for students in...

4124 Sun Nov 7, 9:00, in Ballroom C
Refereed Paper

Towards a WebCenter for Pedagogical Freeware Collaborative Review and Retrieval

Eunhee Kim .... New Jersey Institute of Tech
Julian M. Scher ... New Jersey Institute of Tech
Murray Turoff ..... New Jersey Institute of Tech

A significant amount of freeware is accessible to students and faculty, from a variety of sources, and downloadable from a multitude of web-sites. Much of the freeware, often of equivalent quality to commercial off-the-shelf software, and many times unique and having no commercial equivalent, is underutilized by both educators and students, who generally are unaware of its availability. With constraints on their financial resources, students and faculty are faced with limits on the purchase of commercial software, and would significantly benefit if they were to have a single place they could visit to obtain relevant software which is legitimately free of commercial fees. Our objective for this effort is the design and development of a WebCenter which will provide a "one-stop shopping experience" for both students and faculty who are seeking to obtain relevant freeware for their pedagogical needs. The WebCenter will satisfy the diverse needs of a community of users, who will provide...

4132 Sun Nov 7, 8:00, in Ballroom D
Refereed Paper

Developing Tomorrow's Chief Technology Officers

Val Flynn .... London South Bank University

This paper examines the role of the Chief Technology Officer and the competencies needed to perform the role effectively. While many of these competencies can be developed through in-house training and structured career development, a postgraduate qualification can provide Chief Technology Officers with the theoretical knowledge and skills needed to operate at the senior level. The paper describes a Programme offered at a UK institution that equips aspiring Chief Technology Officers with the skills they need to operate as business and technology strategists.

4133 Sun Nov 7, 8:30, in Ballroom D
Refereed Paper

Before the Team Project: Cultivate a Community of Collaborators

Deborah LaBelle ... Penn State Delaware County

The team project has become an essential component in undergraduate education, especially in the information science and technology curricula. Often, the students are also required to utilize a "Collaborative Learning Tool" such as Blackboard ? to carryout their collaborative activities. However, many students, dare I say the majority of students, cringe at the mere mention of a "Team Project". There are many reasons for this reaction, but one reason is that the students are not prepared to collaborate. They are not prepared to collaborate with each other, and they are not prepared to use the collaborative learning tools effectively. The research in collaborative learning has indicated a need for students to learn how to collaborate, and to engage in non-task interactions to build socio-emotional connections that lead to effective collaboration. This paper explains a few project assignments that I use to create a collaborative work environment both face-to-face, and online, that ...

4134 Sun Nov 7, 9:00, in Ballroom D
Refereed Paper

Systems Development Group Project: A Real World Experience

Elsje Scott .... University of Cape Town

The Group Systems Development Project course of the Information Systems major at the University of Cape Town is a practical course designed to integrate the body of knowledge obtained in other undergraduate theoretical courses. The main objective of the course is to give students a real world experience of the diverse and complex nature of the Information Systems profession and provide them with adequate skills for the global marketplace. This paper

describes the objectives as well as the deliverables and the administration of the course. The basic course content is outlined, and the various stakeholders and their roles are identified. Some discussion is provided regarding the comprehensive set of assessment strategies that has been implemented as well as a number of critical issues that have emerged. Finally, the need for ongoing research in this area is addressed.

Index by Author

Index by University