Spring 2005

Department of Computer Science

Newsletter

Visit the department's web page at:

cs.umr.edu

E-mail us at :

csdept@umr.edu

Phonathon Dates

February:

2,3,7,8,9,10,13, 14 &15

Computer Science Honors Two Alumni

William Eaton received a master of science degree in computer science from UMR in 1970. In 1969 he received a bachelor of arts degree in mathematics from the University of Iowa.

Eaton joined Amoco (now British Petroleum) in 1970. In 1997, he retired as manager of integrated operations, after holding a number of management positions within the company's information technology department, including chief information officer of Amoco's southeastern exploration and production region, and vice president and chief information officer of Amoco Canada.

In 2003, Eaton was elected a charter member of the UMR Academy of Computer Science. Since retiring from Amoco, he has been involved with a number of volunteer organizations in Oklahoma. Eaton and his wife, Daryl, live in Tulsa. They have two children, Mike and Diana.

Jean K. Holley, senior vice president and chief information officer of Tellabs, received a bachelor of science degree in computer science from UMR in 1981. She also holds a master of science degree in computer science and engineering from the Illinois Institute of Technology.

Before joining Tellabs in 2004, Holley was the first CIO for USG Corp. Prior to joining USG, Holley worked for Waste Management and its subsidiaries for nine years, and spent five years at Digital Equipment Corp.

Holley was elected a charter member of the UMR Academy of Computer Science in 2003. She has served as vice chair for Illinois Institute of Technology Rice Campus Executive Board of Overseers and chair of the executive advisory board for Northern Illinois University's College of Engineering and Engineering Technology.

In 2002, Holley received the Spotlight Award from the Chicago Software Association, and was named one of ComputerWorld magazine's top CIOs. In 2000, she was named Association of IT Professionals CIO of the Year. In 1987, Holley was named Outstanding Woman Leader in Business and Professional by the YWCA and received the Award of Merit from the Illinois Institute of Technology.

Alumni Survey

The Computer Science Department continually strives to improve the education its students receive. We consider input from employers of our graduates as one of the key factors in this process. In this newsletter you will find a copy of our new and revised CS Alumni Survey. We would appreciate your completing the survey, folding and taping it so our address is on the outside, and dropping it in a mail box. We'll pay the postage. If you prefer, you may complete the survey by going to the web site cs.umr.edu and navigating to "Alumni, Corporations, and Partners." Please take a moment to complete the new survey. Your feedback is extremely important!

CHAIR'S MESSAGE

We hope you had a wonderful holiday season and that you ere enjoying the start of a promising new year. We look forward to this opportunity to share with you the exciting things that are happening in your department. We hope you enjoy reading about the latest activities. Below, you will find a brief overview of some of the year's activities.

What's new?

We wish to congratulate Ms. Jean Holley and Mr. Bill Eaton on receiving Professional Development degrees in Computer Science at the December 2004 commencement. Ms. Holley and Mr. Eaton are members of the CS Academy's founding board of directors. Ms. Holley is currently President of the Academy. Mr. Eaton is Secretary/Treasurer of the Academy.

The department has identified three areas of excellence on which we will focus. These areas are software lifecycle, critical infrastructure protection, and bioinformatics. We believe these focus areas will provide students with additional choices for broadening their backgrounds as well as enhancing their professional opportunities.

Dr. Mayur Thakur joined the department this fall. He received his PhD from University of Rochester. His work in algorithms and computational complexity provide a valuable teaching and research resource in the application of theoretical computer science to real-world problems. We are delighted to have Dr. Thakur join our faculty.

Last year we reported that we had our ABET accreditation visit in November 2003. We are pleased to report that the department's BS program continues to be accredited by the Computing Accrediting Commission of ABET. The BS program was first accredited in 1986, the first year BS programs were accredited by CSAB (now CAC/ABET)!

As you can see in the following pages, our faculty and staff continue to receive recognition for their outstanding work. Please join us in congratulating Mike Hilgers, Jennifer Leopold, Clayton Price, and Ralph Wilkerson for receiving teaching awards during this past year. We also want to congratulate Carleen Humphrey, our Administrative Assistant, on receiving a Staff Excellence Award. In addition to these awards, our faculty continue to improve the teaching ratings they receive from their students each semester.

Research activity, publications as well as funded research, continues to grow. As the articles in this newsletter suggest, much of our research is interdisciplinary. As indicated in the Critical Infrastructure Protection article, we are working closely with other departments, both on and off campus, to establish a Center for Critical Infrastructure Protection. This center would provide a valuable resource for supporting interdisciplinary research.

You will notice there continues to be a large number of student events in the department. Last fall, we held our sixth Boeing sponsored pizza party for all CS students. We also held our second homecoming event for students and alumni. In addition, the third annual Computer Science Awards Banquet was a huge success. We had additional scholarships to award last year along with many outstanding door prizes. We are always seeking company table, scholarship, and door prize sponsorships for this event.

Our Alumni and Friends

We want to say a special thanks to you, our alumni and friends. We wish to thank all of you, individuals and corporations, for your continued support in a variety of ways including scholarships and endowments, donations to the department, capstone projects for CS seniors, your telling others about CS at UMR, and your taking time to call or send a note. In these times of extremely tight budgets, your generous gifts to the department make a big difference!

We hope you will continue to keep in touch with us either by phone (573-341-4491), fax (573-341-4501), e-mail (csdept@umr.edu), and/or in person. Hopefully you can join us for next fall's homecoming event.

If you are an alum, please take a moment to complete the alumni survey (enclosed version or web version).

If you are an employer of our graduates, please fill out the alumni survey at cs.umr.edu and navigate to "Alumni, Corporations, and Partners".

Dan St. Clair

Computer Science Areas of Excellence

The department has formally identified three areas of excellence on which it plans to focus over the next several years. While we will continue our tradition of providing a strong foundation for our students, these areas of excellence help students identify additional choices for broadening their academic and research backgrounds as well as their professional opportunities. These areas, in which we have been working for some time, are supported by the department's current teaching and research interests.

Software Lifecycle:
UMR's CS program provides a full unified software lifecycle experience over the entire course of the student's CS education at UMR. This experience includes software project management in its many roles, ranging from overall project management and process improvement to the management of individual lifecycle components, including software deployment and evolution.

Critical Infrastructure Protection:
Critical Infrastructure Protection is a multi-disciplinary study dedicated to improving the security, reliability, and survivability of the infrastructures that play a vital role in the effective functioning of our nation. The intention is to improve the quality, survivability, security, and reliability of critical systems using the broadest-based technology possible, to grow a workforce aware of and trained in security (physical and cyber), and to stimulate the economic viability of US corporations and institutions by improving the security, reliability, and survivability of their critical infrastructures.

Bioinformatics:
Bioinformatics is any application of computational methods to address biological problems. Although often used to refer to analysis of genomic information, bioinformatics is defined broadly by the NSF and NIH as "research, development, medical, behavioral or health data, including those to acquire, store, organize, archive, analyze, or visualize such data." UMR's bioinformatics research program specializes in visualization of biological data sets, parallel algorithm development and algorithmic theory for biological data analysis, and management of biological databases.

Additional information can be found at cs.umr.edu.

Bioinformatics Laboratory

CS/BIO311: Bioinformatics
AGACTACCAGAT

The UMR Bioinformatics Laboratory continues to perform interdisciplinary research with students and faculty from computer science, biological sciences, and chemical engineering. Among the projects that have been under development this past year are:

The *MorphologyNet* web-based, interactive viewer and 3D digital library of anatomy which could revolutionize the way anatomy is examined.

CQServer, a software system that allows scientists from all disciplines to simultaneously analyze multiple heterogeneous databases over the web and stay up-to-the minute on new research findings.

A 3D, interactive program to visualize and evaluate obscurant cloud transport and diffusion that enhances the computational tools routinely used for defense training and target acquisition.

The three students involved with these projects who have graduated with a Master's Degree in Computer Science in the last year are Henu Madeti, Thomas Hoeft, and Venkat Ram Ghatti. Dr. Jennifer Leopold (computer science), Dr. Ann Maglia (biological sciences) and Dr. Shubhender Kapila (UMR Center for Environmental Science) head up the laboratory.

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Software Engineering Laboratory

The Software Engineering Laboratory was established to enhance the capabilities for teaching and conducting research in software engineering. It supports research and education in the analysis, design, coding, and maintenance of software systems. The laboratory has workstations and PC's with several CASE tools installed (IBM Rational Rose/RT and Together 6.0). Dr. Frank Liu and Dr. Franck Xia manage the laboratory in addition to teaching a number of software engineering courses.

Dr. Liu and his students have conducted many sponsored research projects in the area of software requirements analysis, object-oriented analysis and design, intelligent computational argumentation for conflict resolution in software design, software process improvement using CMM/CMMI, and software quality function deployment. Much of this research has been supported by six consecutive annual research grants from the Toshiba Corporation. The produced results have helped to improve software quality and software processes in the company. In addition, he and his students have developed a high order object-oriented modeling technique which is being used for hardware/software co-design of FACTS power systems. The technique integrates object-oriented modeling techniques with the structured analysis and design method based on top-down structured decomposition. This effort is supported by the National Science Foundation (NSF) IGERT program, and the NSF MRI program as well as the Sandia National Laboratory. Dr. Liu is also working on several other interdisciplinary research projects, including collaborative engineering design and manufacturing. A recent NSF IGERT program pre-proposal of collaborative engineering design and manufacturing based on their current research results was among 120 (out of 551) pre-proposals invited to submit a full proposal for this highly competitive NSF program.

Dr. Xia's current research is focusing on developing fundamental theories and methods for better object-oriented software engineering. His long-term research goal is to reduce software development time as well as cost and to ensure the quality of software artifacts in various phases of the development life cycle. He and his students have been developing a general semantics framework, by means of a generic object-oriented architectural language, for interpreting the semantics of object-oriented specifications using UML. This framework overcomes the semantics ambiguity in the existing UML standard and enables a rigorous reasoning for detecting inconsistency in various aspects of OO specifications. One of his students is developing a tool for implanting semantics theory and checking the consistency of UML diagrams. Dr. Xia is also working on software quality measurement to improve the maintainability of software design and source code through assessment of change-impact dependency.

Critical Infrastructure Protection (CIP)

Infrastructures, such as the electric power grid, oil and gas distribution and pipelines, transportation systems, telecommunications systems, and information systems, are critical for our nation's operation. computer science plays a vital role in protecting theses infrastructures. To address this national need, the department established Critical Infrastructure Protection (CIP) as an area of excellence (see Areas of Excellence article). Joining with colleges from across the campus and across the University of Missouri System. Our goal is to improve the critical hardware/software integrated systems that make up the nation's critical infrastructures.

The distributed nature of these systems makes them vulnerable to many types of attacks including physical and cyber-based. Further, the diversity of these systems requires expertise in many different areas including "hard" engineering such as civil engineering, electrical and computer engineering, and petroleum engineering, as well as computer science, software engineering, economics, social issues, and cyber security.

The department has many active areas of research that fall under CIP. Dr. Bruce McMillin and Dr. Marissa Crow's (electrical and computer engineering) work with the Power Grid mentioned in our newsletter two years ago and has expanded to include Dr. Daniel Tauritz's work on evolutionary algorithm design of power grids and intrusion detection. Dr. Frank Liu's work in hardware/software co-design for CIP. Dr. McMillin's work continues in fault tolerance and security for CIP. Under funding from Sandia National Labs and the National Science Foundation, the group is constructing a real-time test bed for power flow control devices controlled by distributed algorithms. Dr. Sanjay Madria's work in sensor networks has yielded techniques for secure communication among deployed mobile devices in a first responder or battlefield situation. Dr. Maggie Cheng's work in ensuring reliable *ad hoc* communication among airplanes will ensure a safer and more reliable air transportation system. Dr. Ann Miller's work (in her joint appointment with CS and electrical and computer engineering) has studied vulnerabilities in computer control of existing oil and gas pipeline systems and the dependencies among infrastructures such as oil, gas, water, and power. For more on their research check out the research page on the department's web site (cs.umr.edu).

The departments of Computer Science and Electrical and Computer Engineering have proposed a Center for CIP. This center brings together the computer science, the "hard" engineering, the science, and the social science expertise for which the campus is known. A strong industrial component exists within the center. The center wants to do projects that are of immediate benefit to the nation's utilities and businesses. To discuss becoming a center member, please contact Dr. Ann Miller (miller@umr.edu) or Dr. Bruce McMillin (ff@umr.edu).

Newcomer to the Department

Mayur Thakur joined the Department of Computer Science in the fall of 2004. He received a Ph.D. in computer science from the University of Rochester in July of 2004. His work in algorithms and computational complexity provide a valuable teaching and research resource in the application of theoretical computer-science to real-world problems. His research interests include network and graph algorithms, complexity theory, theory of discrete simulation and modeling, and quantum computation. He has spent the last few summers doing research at Phillips Semiconductors, Microsoft Research, Equinox Corp., Los Alamos National Laboratory, and Northeastern University. Dr. Thakur is currently teaching CS 355: Analysis of Algorithms and CS 455: Algorithms II. He is also on the editorial board of the Journal of Universal Computer Science. Dr. Thakur plays cricket, basketball, and volleyball. This fall he could be seen hitting (or trying to hit) golf balls every Tuesday evening in the faculty/staff/retiree golf league.

Congratulations to Carleen Humphrey

Carleen Humphrey, the Administrative Assistant for Computer Science, was honored for her contributions to campus during UMR Staff Recognition Day ceremonies by receiving a Staff Excellence Award. Carleen was selected from a group of staff members who were nominated by faculty, staff, and students. She was selected based on her job performance, relationship with associates and dedication to UMR. Carleen received a certificate and a check from Chancellor Gary Thomas. We are very proud of Carleen for winning this well deserved award

A&S Excellence in Teaching Awards for Computer Science

The recipients of the College of Arts and Sciences Excellence in Teaching Award for 2003-2004 for Computer Science are Jennifer Leopold, Assistant Professor of Computer Science; Clayton Price, Instructor of Computer Science; and Ralph Wilkerson, Professor of Computer Science. This award honors those who make a special contribution to student retention. A committee of Distinguished Teaching Professors in the College of Arts and Sciences selected the award winners based on student teaching evaluations of faculty members done by the Committee of Effective Teaching at UMR. Clayton was also selected by Sigma Xi as a "Teacher of the Year".

UMR Outstanding Teaching Award for Computer Science

Dr. Ralph Wilkerson, Professor of Computer Science, has won an Outstanding Teaching Award for 2003-2004. The UMR Outstanding Teaching Award is given to roughly the top 25 UMR faculty based upon the course evaluations given in each class. These individuals are selected by the Committee on Effective Teaching and are recognized at a luncheon given by the Provost.

UMR Faculty Excellence Award for Computer Science

Dr. Michael Hilgers, Associate Professor of Computer Science, won a Faculty Excellence Award for 2003-2004! This award is presented to outstanding faculty whose teaching, research and service contributions are exemplary and who strike an effective and appropriate balance among the various aspects of faculty work. The nominations for this award come from all academic departments of the campus and, are reviewed by a committee comprised of distinguished professors chaired by the Provost. The final selection is made by the Chancellor. These awards, for $2500.00, are funded from private donations.

Four Inducted Into UMR Academy of Computer Science

Left to Right:: Margy Beckmeyer, Ralph J. Szygenda, Kim W. Tracy, and Robert C. (Bob) Feldmann

(Photo courtesy of Bob Phelan)

Four computer science alumni of the University of Missouri-Rolla were inducted into the UMR Academy of Computer Science during the group's second annual meeting in Rolla on April 15 and 16, 2004.

The academy honors outstanding computer scientists for their contributions to the profession and their involvement with UMR students and faculty. The academy also serves as an advisory group to the Computer Science Department. More information is available on the department's web page.

The 2004 inductees are:

Margy Beckmeyer of Aiken, South Carolina is currently responsible for the Westinghouse Savannah River Company's information system that is used in the stabilization, packaging, and storage of plutonium-bearing material. She received her bachelor of science degree in computer science from UMR in 1973 and her master of science degree in engineering management from UMR in 1975. She has been recognized by the Department of Energy for her contributions to the development of quality assurance orders, regulations, guidance, and training materials. Margy and her husband Russ, who also attended UMR, live in Aiken, South Carolina, and have three daughters, Kristin (who is currently attending UMR), Megan, and Keegan.

Ralph J. Szygenda is GM Group VP and Chief Information Officer of General Motors in Detroit, Michigan. He is a member of GM's Automotive Strategy Board and is responsible for the Information Systems & Services organization. Accountable for the management of all information technology efforts within General Motors, he is directly responsible for developing and implementing GM's global digital business strategy. Prior to joining GM, he held positions at Bell Atlantic Corporation and Texas Instruments. He received a bachelor's degree in computer science from UMR in 1970. He is also the recipient of an honorary professional degree in computer science and honorary doctorate degree in engineering from UMR. His many awards include induction into the Computer Hall of Fame in 2003.

Kim W. Tracy is manager in the information technology organization for Lucent Technologies in Napierville, Illinois. He has been responsible for directing the infrastructure strategy, eBusiness architecture, and cellular wireless roll-out for Lucent. Before coming to Lucent, he worked for Bell Laboratories. He has authored textbooks in computer science, serves as editor in chief of IEEE Potentials Magazine, and serves on governing boards of IEEE. He received a bachelor's degree in computer science from UMR in 1985.

Robert C. (Bob) Feldmann of St. Louis, Missouri, program manager of the EA-18G fighter aircraft for the Boeing Company, He received a master of science degree in computer science from UMR in 1980, taking night classes at the UMR Engineering Education Center in St. Louis while working at McDonnell Douglas. Since joining McDonnell Douglas in 1976, which was later acquired by Boeing, he has worked in several aircraft programs including the F-15, F/A 18, AV-8B, T-45, C-17, and the Advanced Tactical Fighter (YF-23). Bob is married to Barbara, and they have three sons, Brian, David, and Patrick.

Computer Science Advisory Board

The Computer Science Advisory Board held its annual meeting on April 30, 2004. Members of the 2003-2004 board were Bob Perry (MasterCard International), Curt Schroeder (Lockheed Martin), Herb Krasner (Krasner Consulting), David Schade (SBC), Jeff Herzog (Maryville Technologies), John Hock (IBM), Karen Squires Nordeng (Pearson Educational Measurement), Ken Brenneke (Boeing), Jim Leonard (Boeing), Richard Conn (Microsoft), and Robert Byrne, Jr. (Boeing).

The department is deeply indebted to these alums and friends of the department that provide their time and talents. Their perspective provides valuable insights to the department as we develop and revise our academic and research programs. If you have and interest in serving the department in this way, please contact us at csdept@umr.edu.

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Upsilon Pi Epsilon (UPE)

The design for the CS department T-shirt has been finalized, and the initial supply has been ordered! UPE plans to sell the shirts throughout the remainder of the semester in the CS main office, as well as setting aside a couple of days to sell them in the halls. The phonathon pledge project that UPE has conducted for the past three semesters continues to aid the department in welcoming its incoming freshman.

UMR ACM Student Chapter SIG Security

Left to Right:: Laura Woodard, Dr. Daniel Tauritz, Jason Trent, and Joshua Maib

The UMR Association for Computing Machinery Student Chapter's Special Interest Group on Computer Security (SIG SEC) is more active than ever under the leadership of the new co-chairs, Jason Trent (CS/CpE) and Joshua Maib (IST). Dr. Daniel Tauritz is now, for the third year, its faculty advisor, A new position created this year is that of Publicity Officer which is being filled expertly and most energetically by Laura Woodard (CS). Activities so far this year have included a very well-received presentation by Brian Buege (UMR IT's director of networking and computing services), a talk by Alex Berry about his summer internship at Sandia National Lab's Center for Cyberdefenders, a cantenna building party which involved building antennas from a variety of cans, and a very exciting wardriving event during which several teams of students drove around Rolla in order to map the city's wireless access points employing the self-made cantennas. Next on the agenda is to write-up the results for publication in the Rolla Daily News along with tips for local residents on how to secure their wireless networks.
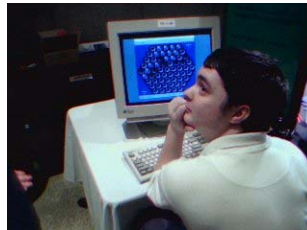

Artificial Intelligence Tournament

Every semester the Computer Science Department hosts the Artificial Intelligence Tournament giving students, faculty and staff a chance to test their skills in programming Artificial Intelligence by having their creations compete against each other and with human beings. Each semester a new challenge is chosen to be solved during the tournament; typical challenges are games and puzzles. Three winners are chosen each semester and presented with trophies at the graduation jubilee by Dean Paula Lutz. In the spring of 2003 the game was Abalone and the winners were, first place: Christopher Walker, second place: Alex Berry, and third place: Brad Martin. The fall 2003 semester challenged everyone with Stratego, so much so that it was used again in spring 2004. The winners for fall 2003 were, first place: Brian Sea, second place: Matthew Allen, and third place: Rahul Maheshwary. In spring 2004 the winners were, first place: John Jost, second place: Michael Thielker, and third place: Jason Godding. The fall 2004 tournament will be held on Saturday December 4, 2004 and the spring 2005 tournament will be held on Saturday April 30, 2005, both events will test everyone's knowledge of chess. Additional information can be found at http://web.umr.edu/~tauritzd/AI-Tournament/.

Computer Science 2004 Awards Banquet

The Third Annual UMR Computer Science Department Awards Banquet held on April 29, 2004, was well attended by students, faculty, alumni, and friends. A short reception preceded the banquet where students had the opportunity to visit with alumni and sponsors and followed with a wonderful meal. Ms. Jean Holley, the SVP and CIO of Telabs, CS alum and the President of the department's Academy, presented a talk entitled "Leveraging IT and Tomorrow's Business." The Computer Science Department awarded several scholarships, handed out numerous awards and recognized faculty for their dedication to the department. The evening concluded with the "Faculty and Staff Trivia Game" hosted by Matt Buechler. Students tried to answer trivia questions correctly to win prizes donated by several of the banquet sponsors. In addition to the trivia prizes, banquet sponsors also purchased tables for the event. The money from table purchases made it possible for all CS majors to attend the banquet free of charge. The 2005 Computer Science Awards Banquet is scheduled for April 28, 2005. If you are in the area, we would be honored to have you join us. Additional information will be available on the CS web page. If you and/or your company would like to participate in the 2005 banquet, please contact Carleen Humphrey at humphrey@umr.edu. Additional information about the banquet can be found by going to cs.umr.edu and navigating to "Department Activities."

Sponsors for the event included:

Accenture

The Boeing Company

Garmin International

Microsoft

Sun Educational Sales –Enterprise Consulting Group

Pearson Educational Measurement

University Bookstore

Maryville Technologies

Computer Science Department

Computer Science Annual Boeing Pizza Party

The annual "get acquainted" pizza party for all computer science majors was hosted by The Boeing Company and the Computer Science Department on Monday September 20, 2004. This was the 6th year for the Pizza Party. UMR alumni, Matt Battles, Kevin Van Leer and Charles Hayes, representing Boeing, they brought door prizes that were given throughout the evening. Approximately 200 computer science students, faculty, and staff attended the party.

2004 Scholarship Recipients

Accenture

Charles Tullock

Anthony Dvorak

John W. Hamblen

John Gibbons

Justin Miller

Rex Widmer Software Archaeology

Elisha Adam Dawson

Will A. Hurlburt

Howard & Lois Cook

Matthew Bleckman

Garmin International

Kevin Markussen

Toshiba Fellowship

Yan Sun

Mark X. Stratman

John Dixon

Lovitt Internet Computing Fund

Xiongzi Hu

Boeing

Sarah Garofalo

Lisa Guntley

Julie Kopinski

Damian Cardona

Marcus McCain

Brandon Murdock

Tyler Nace

Rebecca Dalton

Cara Longhenrich

Laura Woodard

Ellen M. Hodges Memorial

Ha Thi Dam

Kristen Loesch

CS Alumni Scholarships

Chad DeShon

Walter Kopecky

Anthony Blum

Sang Jun Lee

Michael Williams

Matt Bruns

Charles Huber

Daniel Pope

Jacob Mizulski

James Jolly

Stephen Hunter

Nathan Alfermann

2004 Special Award Recipients

CS Leadership

Matt Buechler

CS Mentor

Matt Bleckmann

CS Ambassador

Deja Francis

Outstanding CS Graduate Teaching Assistant

Biswajit Panja

CS Academic Achievement

Adam Lininger

Zachary Nelson

Nathan Alfermann

Christopher Eckhard

CS Academic Achievement (cont'd)

John Gibbons

Kristen Loesch

Adam Nichols

Jason Yonker

Charles Huber

Anthony Blum

Derek Gaston

Andrew Langefeld

Ryan Albarelli

Vishnu Batthula

Alex Berry

Xiongzi Hu

Gautam Kane

Abhishek Misra

David Mitchell

Ekaterina Smorodkina

CS Academic Achievement (cont'd

Craig Stanek

Sathyanarayanan Sundaram

Sunisa Amornwattana

Austin Armbruster

Yan Sun

Distance and Continuing Education

The department continues to offer its junior/senior and graduate level courses through UMR's Distance and Continuing Education program. Classes consist of both local and distance students. Distance students view the classes through streaming internet video while being connected by telephone directly to class discussions. Lecture notes and handouts are provided on the class website. CS classes originate from the UMR campus as well as from the EEC in St. Louis.

The department currently offers several classes via distance education. Some distance students have earned masters degrees by taking the distance courses we currently offer and transferring in additional courses to complete requirements. Plans are currently underway to offer the entire CS masters degree by distance education. In addition, the department currently offers two graduate certificates; one in Software Design and Development and the other in Multimedia and Information Systems.

Complete information about UMR's Distance and Continuing Education program can be found at cs.umr.edu by navigating to "Useful Links" and then to "Distance and Continuing Education." This web site contains schedules and registration information. Additional information can be found at vcc.umr.edu.

Employer Web Survey

If you are an employer of UMR CS alums, we would appreciate hearing from you. Please take a moment to complete the following survey concerning your experience with CS graduates with whom you have worked. The survey can be found by going to the web site cs.umr.edu and navigating to "Alumni, Corporations, and Partners." If you know others that might also provide this information, please send them to this web address. Thank you again for your time and effort. This information is extremely helpful to us in improving the education of our students.

Alumni News

Carolyn J. Tatum has moved back to her hometown of Harrison, Arkansas to be near her son Keith and his children, Cody, 14 years old, and Christian, 7 years old. Computer science allows her to work from home so that she can continue her career and enjoy her family,

Hong-Seng Yek was married two years ago, has been working at Motorola since 1999 as a software release manager and will be transferring to southern California this year.

Michelle R. Buchanan had a baby boy, Michael Walker Buchanan, on February 4, 2004.

Kathleen M. Daniel is currently employed by Kansas City Southern Railway. Her son, Adam, started as a freshman at UMR this past fall.

John C. McClenning is working as a software engineer at WEBMD. His son, Michael, joined his big sister Samantha on August 2, 2003.

Jean K. Holley and her husband Don are still in Chicago.

David B. Leach is employed by COMCAST as a software engineer. He and his wife Amy (Grazier) Leach had their first child in September.

Neil A. Phipps is a senior data center manager for SBC. He married Heather Libbert of Freeburg, Missouri, on June 28, 2003 in St. Louis, Missouri.

John M. McNally is the Director of Engineering for America Power Conversion. He lives in Chicago with his wife Megan and their children.

Donald L. Uher was married on October 15, 2003 to Lyudmila Zolocar, He telecommutes for IBM Outsourcing from Parkersburg, West Virginia.

Stanley B. Lindesmith celebrated his eleventh year with IBM and is working on the popular Websphere Portal. His wife, Lisa, is at the University of North Carolina-Chapel Hill studying the Norwalk virus. Their daughters Emily, nine, and Oliva, five, are doing great.

James W. Hooper is retiring after the spring semester from Marshall University in Hunting, West Virginia , where he has worked since 1991. During his years there he served as Weisberg professor of Information Systems, vice president of Research Funding, Dean of the College of Information Technology and Engineering,, and founding director of the Center for Environmental, Geotechnical, and Applied Sciences. Prior to this he was a professor at the University of Alabama in Huntsville. Before that he was with NASA Marshall Space Flight Center in Huntsville, Alabama. He and his wife, Mona Nading Hooper, are the parents of three children and grandparents of seven.

Robert J. Harris works for Bass Pro Shop as a computer application manager. He has been there fifteen years. His wife, Laura, is a counselor. They have two children, Samantha, eleven, and Austin, nine.

Joseph W. Stahl is currently writing articles for Gettysburg Magazine. His article on Private D.P. Alexander was in issue thirty and the article on Private Bossert was in issue thiry-one. The Washington Times has accepted his article on Private C. Swealt.

Alumni Home Pages

Send a note to csdept@umr.edu with your e-mail and/or home page address if you would like to be listed on our alumni web page.

Homecoming 2005

Please watch our web site for Homecoming 2005 activities.

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COMPUTER SCIENCE ALUMNI AND FRIENDS GIVE GENEROUSLY IN 2004

Once again in 2004 the support for the Computer Science Department from our alumni and friends was tremendous. Thank you for your generous support!

"Your support provides so many more opportunities for our students, " says Dr. Daniel St. Clair, chair. "We hope that we can count on your support again this year. If you have not already started to contribute on an annual basis through the Phonathon, please make this your year to start. We appreciate gifts of all sizes. When they're pooled together, each gift makes a positive difference."

This year we will begin calling our alumni on February 2. When the phone rings in February please take a few moments to share your experiences here at UMR with the student who calls. When asked to make a pledge please say "Yes" and help us continue to provide the opportunities which keep our department on the cutting edge. As state funding continues to decline the gifts received from you each year become increasingly more important and plays a vital role in the success that our student's experience. Any amount you give will be appreciated, and your participation will help make UMR a leader in alumni giving among public universities.

We would like to express our appreciation to all businesses and individuals who gave to the Computer Science Department between December 1, 2003 and November 30, 2004.

Company Donations

Accenture Hr Services

AT & T Foundation

Anheuser-Busch Companies, Inc.

Anheuser-Busch Foundation

Avaya Communication

BASF Corporation

Cadence Design Systems, Inc.

Caterpillar Foundation

Cisco Foundation

Conoco Foundation

DST Systems Inc.

Ford Motor Company

GMAC Insurance Personal Lines

Garmin International, Inc.

General Motors Foundation

Hallmark Corporate Foundation

Harris Foundation

Hewlett-Packard Company

IBM

IEEE

Intel Foundation

Lexmark International, Inc.

Lockheed Martin Corporation

Maritz Incorporated

Maryville Technologies

MasterCard International, Inc.

Microsoft Corporation

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Alexander, Mary C.	1971	Brunts, Barbara E.	1981	Dunford, Randall B.	1974
Altheide, Phyllis	1985	Brusati, Patricia L.	1987	Dziedzic, Charla C.	1983
Altheide, Richard W.	1984	Bryson, Dale M.	1970	Edwards, Harry K.	1964
Amaresan, S.P.R.	1983	Buckley, Jarod Roger	1996	Eggen, Roger Edwin	1986
Anderson, Glenn R	1973	Buehler, Douglas P.	1979	Eisenbath, Keith Richard	1999
Anderson, Phillip L..	1985	Byrd, Samual Martin	1998	Ellis, Michael E.	1976
Asher, Gary Stephen	1986	Call, Terry Michael	1987	Erickson, Christina K.	1975
Aubuchon, Joseph F.	1983	Cameron, Jill Alison	1984	Erickson, Rodney J.	1983
Austin, Christopher L.	1986	Chao, Kuo-Ting	1994	Estep, Ronald L.	1971
Baran, Barry Anthony	1982	Chu, Jau-An	1994	Fannin, David Paul	1992
Bardsley, Jeannine M.	1983	Clifton, Arlene K.	1972	Farley, Mary Ann	1984
Baron, Timothy J.	1979	Cochren, Stephen	1992	Farley, Stanton K.	1978
Becker, Kathryn A.	1976	Codespoti, Daniel J.	1974	Feeler, Preston David	2002
Beckerle, Kelly Marie	1988	Cole, Jon R.	1972	Ferner, Joseph Mlichael	2000
Bedard, Karen A.	1986	Coleman, Charles G.	1985	Foehrweiser, Roger	1987
Beeram, Ranga Reddy	1992	Compton, Laura Lynne	1990	Frager, Alan R.	1974
Bennett, Carol Ann	1992	Cooper, Charles J.	1971	Francis, David H.	1975
Biggers, Bradley Brian	1991	Cothern, Douglas K.	1978	Gabbert, Angela Caryl	1987
Biggs, Roger Earl	1987	Court, Michael R.	1973	Gaitros, Donald L.	1966
Bilbrey, Randall Carl	1986	Cox, David Duane	1983	Galli, Donald H.	1974
Bilderback, Christopher	2002	Crane, Lynn Anne	1984	Gauss, Montie J.	1973
Birdsell, Clifferd J.	1982	Craven, Paul Vincent	1996	Gebhardt, Thomas V.	1978
Bischel, Pat Oscar	1987	Dagestad, Pamela S.	1978	Gieseking, Paul E.	1973
Boehning, Rochelle L.	1983	Daniel, Kathleen M.	1979	Gilbert, Alice Fern	1984
Bohn, Ellen B.	1974	Danz, Steven William	1987	Goetting, Karla K.	1984
Bollinger, Terry B.	1977	Daum, Marilyn S.	1980	Goetz, Carl Evan	1984
Booth, Brian David	1997	Davenport, Jeanette	1987	Gosnell, Michael	2003
Bowman, Charles S.	1986	Davis, Sherry L.	1985	Grotefendt, Judith R.	1974
Brady, Amber Megann	1983	Dearth, David W.	1968	Guevel, Lawrence A.	1976
Brand, Ann Maxine	1984	Debner, David E.	1968	Guntley, Stephen P.	1978
Breidert, Janice E.	1973	DeKock, Arlan R.		Hall, Donald E.	1974
Bremehr, Dan	1983	Denney, Stephen Kent	1994	Hall, John W.	1981
Brenneke, Kenneth J.	1978	Derryberry, Darrell W.	1985	Hankins, Judith A.	1980
Brown, Daniel J.	1974	Doerer, Daniel Michael	1988	Harrington, George Peter	1986
Brown,Michael L.	1975	Doering, Dennis N.	1973	Harrington, Laura Ellen	1983
Bruhn, Kurtis Matthew	1987	Drewes, Laurie Ann	1985	Harris, Robert James	1986
Brune, Charles D.	1978	Drewes, Mark Kenneth	1985	Hayden, Bruce Jeffery	1983
		Duncan, Kevin Tyler	1982	Hayes, Kevin Brian	1988

Name	Year	Name	Year	Name	Year
Herold, Lawerence W.	1974	Loesch, Terry L.	1980	Pace, Gary Glen	1984
Hickman, Lewis Lee	1996	Long, Leland L.	1959	Pace, Randy C.	1975
Hilleary, Alexander L.	1976	Lorenzen, Stanley D.	1975	Panapakkam, Anitha	1994
Hilleary, Cynthia S.	1976	Ludwig, Karen S.	1979	Parrett, Minh T.	1979
Hillhouse, Michael D.	1975	Marlow, Erika Lynn	2002	Parsons, Clyde T.	1972
Hilliard, Anthony Wayne	2000	Martin, Bennie F.	1986	Parthasarathy, Murali	1995
Holden, Peter D.	1977	Maurseth, Vicky J.	1974	Pschke, Allen J.	1975
Holley, Jean Karen	1981	Mausshard, Charles	1983	Paulsmeyer, Brian	1999
Hooper, James W.	1971	Mayberry, Christopher	1998	Peery, John W.	1967
Horstmann, Paul W.	1973	Mayberry, Mark Lane	1987	Perry, Corinne Norine	1985
Huff, Donald Leroy	1993	McAdams, Patricia A.	1977	Peterman, John W.	1984
Hughes, Jason Michael	1995	McBride, Gregory C.	1975	Phillips, William Anthony	1993
Hughes, Larry Martin	1984	McClanahan, Ronald D.	1977	Pile, Thomas N.	1979
Irby, Yvette Renata	1986	McCormick, CRAIG	1968	Pingel, John E.	1992
Irvine, William D.	1975	McLaughlin, Ellen	1989	Plag, Darlene Gail	1981
Jansson, Jana Sue	1990	McLeod, Jeffery Glen	1992	Posch, Raymond J.	1969
Jedlicka, Marla Rene	1987	McMahon, Thomas	1995	Post, Mark K.	1978
Jenkins, William W.	1978	McNally, John Michael	1983	Pritchett, Peggy Ann	1990
Johnson, Andrew J.	1974	Meeks, Robert F.	1987	Puhl, Lisa Joan	1982
Johnson, Jerry G.	1964	Messmer, Kevin Michael	1988	Rafferty, Patrick V.	1975
Jones, John David	1986	Meuth, William H.	1974	Reddy, Timothy Joseph	1987
Kalota, Kevin Jerome	1998	Midgley, Myles J.	1979	Reed, Rebecca S.	1981
Kemp, Russell W.	1970	Miller, Larry DeWayne	1984	Reinbolt, Mark Donald	1985
Kennedy, Kelly Ann	1986	Mills, Andy Ray	1989	Reinhardt, Mary Jane	1986
Khan, Aatif Jawed	2001	Mitchell, Deborah Gay	1984	Richards, James L.	1972
King, Janet M.	1980	Moore, Joseph R.	1972	Richardson, James M.	1988
Kinser, Colby Evan	1988	Moutrie, Chester L.	1968	Richesson, Jennifer Jo	1994
Kornfeld, Paula J.	1979	Mullen, Daniel Francis	1972	Robertson, James	1967
Krasner, Herbert C.	1973	Nagawiecki, Gregory	1984	Roller, John C.	1972
Kuebler, Kenneth L.	1970	Nayar, Sanjay	1993	Rothschild, Susan H.	1974
Kuhn, Catherine M.	1976	Newberry, Rosemarie C.	1979	Sage, Barry E.	1980
Landgraf, Joseph	1987	Nguyen, Hoang Dothe	2002	Sanders, Chester L.	1978
Langan, Robert Paul	1986	Niedergerke, Robert L.	1991	Santos, Carmela	1996
Laufman, Anne E.	1983	Nolde, Keith A.	1974	Savells, Kenneth C.	1974
Leach, David Bruce	1996	Oakes, Jack L.	1990	Scalfando, Douglas A.	1986
Lei, Gin Yu	1984	Oldroyd, Juanice E.	1983	Schafale, Richard G.	1973
Leitz, Carol Ann	1982	Oligschlaeger, Brian	1995	Schaper, Gary E.	1993
Lenz, Richard G.	1974	Olmstead, Shelia M.	1985	Scheilfer, Thomas E.	1986
Liao, Ruijia	1996	Omohundro, Warren C.	1975	Schneider, Robert J.	1971
Lima, Joao Araujo	1999	Ortbals, Robert J.	1978	Schneider, Susan	1982
Lindstrom, John A.	1973	Ortiz, Pedro Julio	1983	Scholle, Kenneth E., Jr.	1982
Loesch, Janet L.	1980	Owensby, Roger Wayne	1986	Schroeder, Curtis Michael	1988

Name	Year
Schuehler, David Vincent	1993
Serban, Cristina	1993
Settle, Benjamin A., Jr.	1983
Shi, Yuning	2000
Simpson, John Lawrence	1997
Sinn, Elizabeth A.	1976
Sinn, Larry F.	1975
Sisko, Bruce Peter	1987
Smith, Brian Lynn	1987
Smith, Houstin G.	1981
Spencer, Kate	2000
Spradlin, Charles Jr.	1983
St. Clair, Dr. Daniel C.	1975
Stager, Scott P.	1970
Stalnaker , Kevin W.	1979
Stamer, Paul Joseph	1997
Starbuck, Jason Leon	1997
Stearns, Steven Bryan	1996
Steelman, Rhonda L.	1984
Steffan, Cheryl A.	1969
Stone, Barry N.	1978
Struckhoff, John J.	1974
Swoboda, Scott Alan	1994
Tadda, George P.	1989
Tatum, Carolyn Joan	1982
Taylor, Charles Ray	1973
Taylor, Timothy Topper	1987
Thilker, Steven Lindell	1991
Thorsell, Carl W. Jr.	1969
Treptow, Eric B.	1981
Turley, Matthew Linwood	1992
Uebele, Cynthia A.	1982
Umstead, Christopher	1985
Underwood, Diane E.	1981
Veatch, Bobby Ray	1982
Veatch, Marilyn G.	1982
Veden, Leonard S.	1973
Vipani, Rajiv P.	1984
Volkaitis, George L. Jr.	1974
Walker, Joseph D.	1974

Name	Year
Walker, Rhonda A.	1977
Wang, Jianwen	1996
Webb, Johnny S.	1971
Wegman, John L.	1975
Westermayer, Jill A.	1976
Wexell, Wesley Laverne	1997
White, James J.	1974
Wieberg, Peggy A.	1986
Wilkerson, Ralph W.	
Wilkins, Arthur T.	1978
Winfield, Scott B.	1973
Wiseman, Susan Marie	1987
Woods, Kathy Sue	1984
Work, Paul R.	1990
Workman, J Douglas	1971
Woytus, John Martin	1987
Wren, Frances K.	1978
Wynn, Scott Douglas	1989
Xie, Zhidong	1999
Yarnall, Charles F.	1976
Yek, Hong-Seng	1985
Yu, An-Chi	1988
Zagarri, Ronald C.	1972

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Name	Year
Abraham, Steven Charles	1995
Abshier, John C.	1983
Adams, Steven Richard	1982
Androlewicz, Thomas R.	1977
Antal, David D.	1975
AuBuchon, Joseph F.	1983
Bailey, Dr. Wayne P.	1976
Bardsley, Jeannine M.	1983
Batcheler, Joseph Edward	1995
Beckmeyer, Margy A.	1973
Berkbigler, Kathryn M.P.	1973
Boecker, Mark S.	1974
Booth, Brian David	1997
Brandon, Dwight W.	1983
Braun, Paul A.	1981
Brewer, David W.	1969
Buch, Brent Allen	2000
Buchanan, Michelle Reena	1996
Burke, Terence Michael	1995
Burstall, Frederick C.	1980
Butrus, Diane Margaret	1985
Canis, Randy L.	1997
Canis, Walter	1972
Carson, David J.	1975
Chen, Ms. Emy A-Mei	1974
Chrisman, Jr., George F.	1969
Coffman, Mary B.	1978
Cook, Aaron L.	1977
Cook, Thomas Edward	1985
Cornell, David Lawrence	1986
Cox, Steven George	1998
Crenshaw, Robert J.	1974
Crume, James L.	1981
Danner, Mary B.	1973
Dearth, David W.	1968
DeKock, Dr. Arlan R.	
DePauw, Thomas J.	1973
Desalvo, Jason Joseph	1999

Dillon, Janet Elaine	1982	James, David Loren	1985	Montague, Michael W.	1973
Dimmick, Marijo	1992	Jecker, Gregory H.	1973	Morrison, David W.	1967
Doerr, Jerry W.	1967	Jones, David S.	1964	Muldoon, Mary Ellen	1991
Donze, Robert J.	1972	Jones, Dr. James S.	1974	Musial, Christopher	1982
Drake, Sandra Jo	1993	Jones, Roger M.	1971	Nau, Steven N.	1970
Dupont, Steven J.	1974	Kammer, Darren R.	1991	Nayar, Sanjay	1993
Eaton, William A.	1970	Keep, Andrew William	1999	Nekorchuk, Russell L.	1970
Ehlmann, Bryon K.	1970	Kennedy, Kelly Ann	1986	Nemer, Dr. Nicole Anne	1994
Erickson, Christina K.	1975	Kercher, Bruce Edward	1999	Newcombe, Christopher	1991
Feldmann, Robert C.	1980	Kerns, Randy G.	1974	Nguyen, Kate	2002
Fieseler, Catherine N.	1980	Kleekamp, Kurt Richard	1987	Nichols, Byron K.	1973
Fischer, Thomas W.	1976	Kleikamp, David John	1986	Nordeng, Karen Squires	1989
Fitzgerald, Barton L.	1993	Klemmer, Dr. Susan H. M.D.	1966	Oellig, Galen R.	1988
Freiberger, Keith	1984	Kuebler, Kenneth L.	1970	Parker, Jerre L.	1984
Ganofsky, Jr., John R.	1978	Kuhn, Catherine M.	1976	Parodi-Hall, Carla Cecilia	1994
Gentry, Timothy W.	1977	Lahm, James L.	1988	Peterson, Jr., Richard R.	1985
George, John Scott	1972	Lenz, Richard G.	1974	Phipps, Neil Alan	2001
Gerlt, Robert Eugene	1989	Lindsey, Regulah M.	1982	Piper, Timothy Edward	1996
Gieseking, Paul E.	1973	Lindstrom, John A.	1973	Potzmann, Kim J.	1970
Gilbert, Alice Fern	1984	Link, Madonna R.	1989	Pratt, Michael L.	1978
Goertzen, Patrick H.	1982	Little, Russell D.	1982	Pritchett, Peggy Ann	1990
Gower, Marcia Sue	1989	Loesch, Janet L.	1980	Pryor, Gary Alan	1995
Graham, David Brian	1983	Loesch, Terry L.	1980	Puhl, Lisa Joan	1982
Greer, Douglas Ray	2000	Luckcuck, Paul H.	1985	Randazzo, Vincent A.	1989
Haines, Benjamin John	1985	Lyon, James S.	1972	Richards, Dr. James L.	1972
Hall, Allyson Taylor	1997	Magee, Michael W.	1978	Rickey, Christopher Ryan	1997
Hall, Charles Ray	1983	Marshall, William K.	1984	Rider, Adam Clinton	1993
Hayes, Kevin Brian	1988	Maxwell, Shonie Christine	1994	Robinson, Sally J.	1987
Helden, William Alan	1997	McBride, Sandra R.	1970	Rothschild, Susan H.	1974
Hellrich, James H.	1973	McClenning, John C.	1991	Rushton, Melvin A.	1975
Herman, Bradley S.	1981	McCrary, Lawrence E.	1983	Savells, Kenneth C.	1974
Hicks, Richard Jay	1989	McMahon, Thomas Patrick	1995	Scarponcini, Dr. Paul	1988
Hilgers, Dr. Michael G.	1985	McNicholl, Dr. Daniel G.	1980	Scheer, John Albert	1988
Hirschbuehler, Daniel C.	1980	Meier, Curtis P.	1983	Scherer, Keith W.	1982
Ho, Kuang C.	1971	Menke, Elaine A.	1973	Scherer, Kenneth Paul	1982
Hock, John R.	1982	Menkel, Phillip Louis	1998	Schmutzler, Allen J.	1977
Hojnowski, James G.	1984	Mersinger, Rozann P.	1981	Schrader, Aaron James	1999
Howard, Steven R.	1981	Mills, Andy Ray	1989	Schroeder, Curtis Michael	1988
Huff, Donald Leroy	1993	Minogue, David	1987	Short, Mark J.	1981
Ivers, Jeffrey L.	1974	Mirly, David Michael	1989	Sigman, Scott Lee	1999
Jakkidi, Srinivas	2001	Miskell, Lynn Rene	1983	Simmons, James W.	1981

Smith, Houstin G.	1981
Smith, Johanna Marie	1985
Smith, Neil S.	1968
Smith, Steven Murphy	1990
Smith, Todd Walker	1985
Sowers, James R.	1969
St. Clair, Dr. Daniel C.	1975
Stark, John Evan	1989
Steffan, Cheryl A.	1969
Stocking, Terry Lee	1989
Stone, John Edward	1994
Stratman, Curtis Steven	2001
Stratman, Mark X.	1973
Sullivan, Kevin Dennis	1995
Szygenda, Ralph James	1970
Tatum, Carolyn Joan	1982
Taylor, Timothy Topper	1987
Tebo, Stephen D.	1968
Thompson, Keith G.	1995
Thompson, Ralph J.	1969
Thornton, Jeffrey A.	1980
Timson, George Robert	1986
Toombs, Howard L.	1976
Tutko, Richard Lewis	1988
Uher, Donald L.	1975
Urban, Mark A.	1980
Washburn, Ricky L.	1979
Wasleski, Steven Francis	1987
Watson, Dr. Lowell R.	1979
Watson, Susan E.	1983
Williams, Nelson	1972
Wittmaier, Charles Walter	1996
Wurtzler, Daniel R.	1982
Wylie, James G.	1969
Yelton, Ken Stuart	1986
Zike, David Scott	1982

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Keeping In Touch

Dr. Maggie Cheng has had a busy, yet fruitful, year. She offered the first wireless networking course in the Computer Science Department, CS 401 Advanced Topics in Wireless Networking. This course will be offered once a year. Dr. Cheng has enjoyed teaching this course and sees it as a chance to expose graduate students to cutting edge research in wireless networking. She continues to teach CS 285 and is looking forward to teaching CS 153 in the Spring. . In addition to teaching, Dr. Cheng has spoken at conferences, workshops, and served as an invited panelist for NSF in her research field.

Dr. Fikret Ercal was appointed to serve on the University of Missouri Research Board for another two years. He is teaching courses in parallel programming, analysis of algorithms, and operating systems. He continues to do research in the bioinformatics area with particular emphasis on gene clustering and recently published a paper on the subject in the journal DNA and Cell Biology. Currently, Dr, Ercal is serving as the Associate Chair of the Computer Science Department.

Dr. Michael G. Hilgers has been very active in developing and supporting several activities. His Virtual Environment and Object Modeling (VEnOM) laboratory received quite a bit of publicity this past year. Its flagship project, the First Responder and Simulating Training Environment (FiRSTE) system has been featured in numerous television and newspaper articles. Mike gave presentations about the use of virtual reality training in the Missouri State Legislature and to a US Congressman. VEnOM is also part of the mult-million dollar Western Reserve Mining Training and Translation Center. Dr. Hilgers continues to act as the director of the Center for Technology-Enhanced Learning that is developing a range of software products from speech therapy tools for aphasia to learning objects for GIS data for Civil Engineers. He is currently the President of Academic Council and is chairing the campus-wide strategic planning effort. Mike's family continues to be his greatest joy and life-support unit. Many thanks are due to his wife Lois, daughter Abigail (four years old), and son Benjamin (two years old) for giving him the strength to face each day.

Dr. Jennifer Leopold continues to conduct interdisciplinary research in bioinformatics with UMR colleagues from biological sciences and chemical engineering. In July she was awarded a $180,000 grant from the National Science Foundation Division of Undergraduate Education for a scholarship program to facilitate scholastic achievement in computer science, engineering, and mathematics. Dr. Leopold recently received a UMR College of Arts and Sciences Excellence in Teaching Award for the 2003-2004 academic year.

Dr. Frank Liu works in software engineering application in FACTS Power networks. This work is supported by NSF and Sandia National Laboratories. Dr. Liu continues his research collaboration with the software engineering center at the Toshiba Corporation. Dr. Liu teaches software testing, quality assurance, data structures, and software engineering II. He is the ACM Programming Team advisor. The ACM Programming Team won the local contest of the ACM mid-central region and ranked first among all the teams in the state of Missouri.

Dr. Sanjay Madria is directing the W2C (Web and Wireless Computing) Lab, and is currently busy with his funded research projects, including a newly funded commercial project. He graduated three students last year, and now has seven masters and PhD students. Dr. Madria has hired three undergraduate students for one year in the W2C lab who are working on NSF funded projects. He continues to teach courses in the area of web and wireless computing. Last summer he had a good visit to many universities in Europe and South Africa, where he delivered invited talks.

Dave Mentis continues to teach CS 74 (Introduction to Programming in C++) and CS 153 (Discrete Math). He is still involved in the department's computer systems administration. Mr. Mentis and his family live on the their farm and are always involved in a variety of projects.

Dr. Bruce McMillin and his colleagues are making major strides in Critical Infrastructure Protection (see article). "It's an exciting time to be able to contribute to this vital area." He continues as Graduate and Research Coordinator. On the departmental research front, funding is growing towards $1million for this year, a new record for Computer Science. This funding has translated into more graduate students working on thesis work, more undergraduates involved in research projects, and newer equipment for the department. Our goal is to continue to improve our traditions of excellence in education while, simultaneously, growing the research program. With the declining state support for education, we must improve our external funding to continue to be viable. On the home front, after a very long six months of remodeling, the remodeling job is finished. His wife, Lori, now employed by UMR IT, maintains a site with pictures of some of their cooking feats and the new kitchen. It's a fun hobby but they don't think they will be impacting the Rolla restaurant scene.

Dr. Ann Miller, Cynthia Tang Missouri Distinguished Professor of Computer Engineering, holds a joint appointment with CS. Dr. Miller's Trustworthy Systems Laboratory gives students hands-on experience with high-speed routers, switches, and hubs in order to configure networks and subnets. The stand-alone network also allows students to work in attacker-defender teams. Dr. Miller is also the Assistant Chair for Computer Engineering within the Electrical and Computer Engineering Department.

Clayton Price has had a very interesting, insightful, and productive past three years. Mr. Price has received recognition from the college for his good teaching efforts by winning, for the third consecutive year, the College of Arts and Sciences Excellence in Teaching Award. Covering CS 328 for the third time this semester has brought him new respect for the discipline, the C++ language, the students, and the GTA help. "It's a challenge, but always a rewarding one." As usual, every fall semester ushers in a whole new class of freshman and transfer students who keep him hopping. The work never ceases, but he truly enjoys bringing new students into the fold and helping them to adjust to the college life. Mr. Price has been busy at home with extensive remodeling projects, a huge and bountiful garden, and plenty of livestock responsibilities. Some hobbies, cycling and kayaking, have had to fall by the wayside due to other responsibilities. However but he still spends as much time as possible hiking in the national forests.

Keeping In Touch

Dr. Chaman Sabharwal continues to teach Data Structures II (CS 253) and Java Gui and Visualization (CS 342). In the fall of 2005 he will teach a new course Modular Software Systems Design and Development (CS 301). Dr. Sabharwal still commutes back and forth from St. Louis.

Dr. S.R. Subramanya continues to work in the area of computer security and multimedia systems.

Dr. Daniel Tauritz continues to evolve his advanced graduate course on evolutionary computation (pun intended!) as well as his artificial intelligence course (CS 347). Two projects from his EC course were presented by Alex Berry and Matt Johnson at the ANNIE 2004 conference in St. Louis, Missouri. He also sponsors the Artificial Intelligence Tournament held each semester. On the research front Dr. Tauritz is continuing his work on developing computational intelligence approaches to intrusion detection and response, as well as the placement and control of FACTS devices to increase electrical power grid reliability. He is also enjoying his third year as the UMR ACM student chapter SIG Security advisor (see article).

Dr. Ralph Wilkerson continues to work as the Associate Dean of the College of Arts and Sciences for Graduate Studies and Research. He was awarded the College of Arts and Sciences Excellence in Teaching Award as well as a UMR Outstanding Teaching Award.

Dr. Donald Wunsch, Mary K. Finley Missouri Distinguished Professor, has continued to direct the Applied Computational Intelligence Laboratory. He supervised the completed Computer Science Master degree of Paul Pigg, who is now with Boeing Phantom Works in Seattle, and the PhD of Sam Mulder, who is now a Senior Member of the Technical Staff with Sandia National Laboratories. Dr. Wunsch continues his work on neural networks and reinforcement learning applications in VLSI and Power Systems. He is also continuing Sam's research on the Traveling Salesman Problem, which yielded the best heuristic to date for instances with over one million cities. Other research activities include bioinformatics, smart sensors, fuzzy logic, and evolutionary computation. He chairs the Computer Security Task Force, is the UMR representative to the University of Missouri Bioinformatics Consortium, and President-Elect for 2005 of the International Neural Networks Society. He is also an Action Editor of the Elsevier journal Neural Network. Dr. Wunsch travels frequently, and is sometimes able to bring along his wife, Hong, and five year old son, Donnie, who enjoy gaining a broad perspective on our nation and world.

Dr. Franck Xia's research activities span several fields, ranging from digital topology, discrete differential geometry, and computer vision to software engineering. He is an associate editor of the Pattern Recognition journal, Elsevier, and serves on the program committee of several international conferences. His long-term interests remain seeking a better representation of objects for computer vision and pattern recognition systems. Dr, Xia has discovered and proved a new topological invariant for three-dimensional digital objects. The invariant overcomes a theoretic weakness of a well-known one, Euler characteristics, found by Euler centuries ago. Dr. Xia is supervising one graduate student for developing a new differential geometry theory that can be directly applied to three-dimensional digital objects in computer images. These objects are intrinsically irregular for which the classical differential geometry becomes inadequate. In the software engineering area, Dr. Xia is focusing on developing fundamental theories and methods for better object-oriented software construction (see Software Engineering Laboratory article). Currently, Dr. Xia, is responsible for teaching Programming Languages and Translators (CS 236), Software Engineering I (CS 306), and Object-Oriented Analysis and Design (CS 308), He enjoys teaching these courses and integrating the most recent research outcomes, including his own results, into these courses.

Dr. Vincent Yu teaches numerical methods in CS and web programming and systems analysis in IST. His research interests are in the areas of data/text mining, information retrieval and business intelligence. He is currently working as a Co-PI on an NSF project, Innovation Information Infrastructure. The major objective of the project is to develop a virtual social network. He is working on the issue of matching users' requests with text mining.

Carleen "Corky" Humphrey is still keeping very busy with her departmental duties. She enjoys working in the Computer Science Department. The students and faculty are a great group to be around. She enjoys spending all of her free time with her family and especially her 7 year old grandson, Briar and her new granddaughter, Abigail who is 7 months old.

Rhonda Grayson is enjoying the challenges and changes of her job. She enjoys working with the students and faculty. On the home front Coy, her son, turned sixteen in November thus making her life a lot more complicated. Rhonda spent her summer following her son on the rodeo circuit. She also had the pleasure of watching him show livestock at the county fairs, where he took Overall Reserve Grand Champion Steer and Grand Champion Carcass, quite an accomplishment. She enjoyed watching him at both events and is looking forward to next summer when they start again. In the mean time she plans to relax at home with her family.

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Computer Science

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Rolla, MO. 65409-0350

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