

Department of Computer Science Spring 2003 Newsletter

COMPUTER SCIENCE HONORS DAN McNICHOLL WITH A PROFESSIONAL DEGREE DURING FS2002 COMMENCEMENT



Dr. Daniel G. McNicholl is the chief information officer for General Motors North America (GMNA). McNicholl is responsible for all information technology and systems, including such areas as engineering, manufacturing, sales, marketing, and business services. His other duties include leading the information technology organization to a position where technology can bring a competitive advantage to GM, using technology to reduce the time it takes to develop products and bring them to market, developing more sophisticated systems to track and analyze cus-

tomer behavior, and taking advantage of advances in electronic commerce and the internet. McNicholl joined GM in June 1997 from Whirlpool where, as vice president and general manager of the company's Global Air Treatment Business, he was responsible for their air conditioning and dehumidifier business worldwide. Prior to that, he was Whirlpool's vice president of information systems. McNicholl has a bachelor's degree in computer science from Brooklyn's Pratt University; a master's degree in computer science and a doctorate degree in philosophy of computer science, both from the University of Missouri-Rolla; and an M. B. A. from Washington University in St. Louis.

UPSILON PI EPSILON (UPE)

The officers for the Fall 2002 semester were Firak Kahraman, Matt Griffith, Brenda Driver and Matthew Ryan. Dr. St. Clair is the faculty advisor. After having good results from last year's efforts, the service project for this year's pledge class will consist of members calling prospective students who have expressed interest in Computer Science at UMR. Recently, UPE adopted a revised and updated constitution and by-laws. UPE looks forward to initiating a new pledge class this year.

Inside this issue:

| Chair's Message | 2 |
|------------------------|----|
| Newcomers to CSc | 4 |
| Scholarship Recipients | 4 |
| CS Awards Banquet | 5 |
| Keeping in Touch | 14 |
| Donations | 11 |
| Alumni News | 9 |

Visit the department's webpage at: www.cs.umr.edu

or e-mail us at csdept@umr.edu

Phonathon Dates:

February:

5, 6, 9, 10, 11, 12

13,16 & 17



CHAIR'S MESSAGE



Greetings from your computer science department! I hope this newsletter finds you and yours enjoying the start of a happy and prosperous new year. Each year I look forward to this time when I get an opportunity to share with you the exciting things that are happening in the Department.

Faculty and Staff

Two new faculty members joined us this fall. Dr. Jennifer Leopold came to us from the University of Kansas where she was a postdoctoral research associate. Dr. Daniel Tauritz received his PhD in Computer Science from Leiden University, The Netherlands (Holland) this past summer. In the short time they have been in the Department, they have started research groups in bioinformatics

and in machine learning and have already been awarded research grants.

The "Keeping in Touch" section brings you up to date on the activities of faculty that returned this past fall. Note that two of the Department's faculty members have new assignments. Arlan DeKock is currently full-time Dean of UMR's new School of Management and Information Systems. Dr. Ralph Wilkerson has been appointed an Associate Dean of the College of Arts and Sciences by Dr. Paula Lutz, the new Dean of the College. Dr. Wilkerson, Mr. Price, and Mr. Srinivas Jakkidi have also received teaching awards.

A sad note to this past year was the passing of two fine gentlemen, Dr. John Hamblen and Dr. John Prater. Additional information can be found in the "In Memoriam" article.

Events

Several exciting events have occurred since our last newsletter. These include the first CS Awards Banquet held on March 21, 2002. This new event was a huge success. The next banquet has been scheduled for April 10, 2003. We hope that you can join us if you are in the area.

The Computer Science Advisory Board met on March 22, the day after the banquet. This organization is extremely helpful in providing support and advice for the Department. If you have an interest in participating, please contact me. The commitment is minimal and the perspective that the Board provides is most helpful.

We are working on two new activities for the upcoming spring and fall. This spring, the new Academy of Computer Science will hold its first meeting. This academy, like similar academies in other departments, will provide support and guidance to the Department in several of its development activities. Ms Jean Holley, VP & CIO,USG Corp. and Mr. Mark Stratman, VP Cap Gemini Ernst & Young have been helping us put together a distinguished Executive Start-Up committee which will lay the foundation for the Academy.

The second new event will be at next fall's homecoming when we plan to host a new Departmental homecoming activity. More information on this activity and a request for your input is provided in a separate article.

Teaching and Research

The following pages provide insights into our teaching and research activities. As you can see, we have a lot of exciting things happening. We continue to teach classes which contain both local and internet students. Some of our courses are generated by off-campus adjuncts and sent back to an electronic classroom on campus.

Our research activities continue to increase as well as do our publications and our external funding. Dr. Bruce McMillin, the Department's Research Coordinator, has developed an internal proposal review process that provides for reviewing proposals before they are submitted to funding agencies. This has already resulted in a 10% increase in our proposal success rate for the fall semester!

Enrollment continues to grow both in the Department and at the campus level. The Department currently has 398

(Continued on page 3)

COMPUTER SCIENCE PAGE 3

majors, 304 of which are undergraduates. This is a 2.1% increase from last year. Total UMR enrollment this fall was 5,240, a 7.3% increase over fall 2001. Computer Science continues to be the third largest department on campus in terms of number of majors.

As we continue to grow, it becomes more and more important for the Department to maintain an up-to-date set of goals along with a list of approaches for achieving these goals. To this end, we have developed a detailed list of departmental goals which covers a variety of activities. This list has already proven extremely valuable in helping us improve our teaching, advising, and research activities. It will also be helpful in our accreditation review next fall.

Our Alumni and Friends

The Alumni News section contains information sent to us by several alumni and friends of the Department. We are always glad to hear from you. We also wish to congratulate Dr. Dan McNicholl who received the CS Professional Degree from UMR this past year.

We wish to thank all of you, individuals and corporations, who have supported and continue to support the Department in so many ways. Your contributions come 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. We appreciate each and every one of these forms of support.

We hope you will continue to keep in touch with us either by phone (573-341-4491), fax (573-341-4501), e-mail (stclair@umr.edu), and/or in person. Be sure to sign up for our alumni listserv (see article). We would also encourage you to make regular visits to the Department's web page at www.cs.umr.edu.

Dan St. Clair

UMR PROGRAMMING TEAM PLACES AT THE ACM MID-CENTRAL PROGRAMMING CONTEST

ACM's Mid-Central Programming Contest was held on Saturday, November 2, 2002. Two UMR teams participated in this contest. Team A, which consisted of Cory Stricklin, Brad Martin, and Brian Blaha, won the First Place Local Standing among twelve teams and the Regional Sixth Place Standing among one hundred eight teams. This was the best rank achieved by any team from the state of Missouri! Team B members were Jeffrey Field, Kasthurirangan Parthasarathy, Brian Sea and Richard Wilson. UMR team coaches were Fikret Ercal and Frank Liu.

RALPH WILKERSON WINS TEACHING AWARD



Dr. Ralph Wilkerson, Professor of Computer Science, has won an Outstanding Teaching Award for 2001-2002. The UMR Outstanding Teaching Award is given annually 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..

NEWCOMERS TO THE DEPARTMENT

Jennifer Leopold received her Ph.D. in Computer Science from the University of Kansas in 1999. Prior to joining UMR this fall as an Assistant Professor in Computer Science, she was a postdoctoral research associate at the

University of Kansas Natural History Museum and Biodiversity Research Center. Her research interests range broadly in human-computer interaction and end-user programming environments, with particular focus on web-based and multimodal user interfaces and visual programming languages. For the last three years she has pursued many of those interests through research projects in the field of bioinformatics, wherein the end-users are biologists who are untrained as programmers or IT professionals. In particular, she is interested in developing and studying the use of software tools that will allow such "public programmers" to use powerful information technology to enhance their research, without the need for traditional programming training. The primary focus of her research has been the development and usability analysis of a form-based visual programming language called WebFormulate. The development of this end-user software tool has facilitated her research in three related areas: continual query systems, visual query systems, and multimodal user interfaces.



Daniel Tauritz joined the department in August 2002 as an Assistant Professor. He received his Ph.D. degree in Computer Science from Leiden University, The Netherlands (Holland) in 2002. His dissertation research was concerned with adaptive information filtering and automatic text classification, employing evolutionary computation and neural networks for optimization. The data model underlying this research was based on weighted n-gram frequency



distributions, a statistical method for performing feature extraction on sequences (such as written and spoken text). Fall semester 2002 he taught a novel course on Evolutionary Computation and this semester he is teaching CS 347 - Introduction to Artificial Intelligence Programming. His current research interests carry the following labels (some overlap): evolutionary computation, computer security, machine learning, computational intelligence, neural networks, artificial intelligence, and optimization. The newest line of inquiry is applying evolutionary algorithms (and other computational intelligence algorithms) to computer security; in specific, for optimizing intrusion detection systems. Daniel and his wife Sharon live on a farm near Salem, together with their dog Solly and cat Bootsie.

THIS YEAR'S SCHOLARSHIP RECIPIENTS

Accenture

Jonathan Mitchem

Boeing

Jessica Ferguson Erin Pringle Adam Cushman

Howard L. & Lois M. Cook

David Gwyn

Sprint

Matt Battles

John W. Hamblen

Todd Simpson Don Luna

Rex Widmer

Charles Huber

CSc Alumni Scholarship

David Hammon Brenda Driver Brad Jennings Sang Lee Antonia Chang Son Xuan Vu

CSc Alumni Scholarship (continued)

Clayton Weidinger Bryan Cool

Computer Science Department

James Baker Travis Bass Bradley Brueckner Aaron Carrel Reid Stephens Jr. Rebecca Bilderback Robert Richter

COMPUTER SCIENCE AWARDS BANQUET

On March 21, 2002, the Department held its first annual CS Awards Banquet. Students, faculty, staff and numerous guests enjoyed the presentation by Mr. Herb Krasner, President of Krasner Consulting and Senior Lecturer at the University of Texas, Austin. His presentation was entitled "Building the Foundation for a Successful Career in Computing." Following his presentation, numerous scholarships and special awards as well as door prizes were presented. Scholarship award recipients are listed on page four. Several individuals received special awards: Eric Sigler, CS Ambassador Award; Dayle Majors, CS Mentor Award; Eric Sigler, CS Leadership Award.



The Department would like to thank the companies and private individuals that participated in sponsoring tables of students, door prizes, and scholarships. Your support and enthusiasm helped make this event a huge success! Although we did not achieve our goal of "treating" all CS majors to dinner, we were able to significantly reduce the cost to students.

The 2003 Computer Science Awards Banquet will be held on April 10, 2002. We would be delighted to have you join us if you are in the area. Additional information will be available on the CS web page as the event approaches. If you and/or your company would like to participate in the 2003 banquet, please contact Dan St. Clair at stclair@umr.edu.

COMPUTER SCIENCE GRADUATE TEACHING ASSISTANT



Srinivas "Jack" Jakkidi was named the Outstanding Graduate Teaching Assistant for 2002 by the University of Missouri-Rolla Parents Association. Jack is working on a Master's Degree in Computer Science. He also is a member of the UMR Solar Car team. The annual award was presented during UMR's Family Day, which was held October 19th on campus. The Award consisted of a \$500.00 stipend and a certificate of appreciation. The award recipient is determined based on student evaluations done at the close of each semester.

CLAYTON PRICE WINS COLLEGE OF ARTS & SCIENCES EXCELLENCE IN TEACHING AWARD

Clayton Price, Instructor of Computer Science, was one of the recipients of the College of Arts and Sciences Excellence in Teaching Award for 2001-2002. This is a new award in the College of Arts and Sciences designed to honor a group who make a special contribution to student retention. The award winners were selected by a committee of Distinguished Teaching Professors in the College of Arts and Sciences based on student evaluations of faculty members done by the Committee for Effective Teaching at UMR.





Phonathon Dates: February 5,6,9,10,11,12,13,16 & 17



PAGE 6 COMPUTER SCIENCE

MACHINE LEARNING LAB (ML-LAB)

Since joining the Department this fall, Daniel Tauritz has established the Machine Learning Lab (ML-LAB), currently located in 326D. The current focus of the ML-LAB is to employ a wide variety of machine learning techniques to solve an important computer security problem, namely intrusion detection. In plain English: how can we get a computer to recognize that someone is trying to, or already has, gained unauthorized access and what should be done to stop this illegal access once it has been detected? Some of the machine learning techniques used are covered in courses such as CS 347 "Artificial Intelligence", CS 378 "Neural Networks", CS 404 "Data Mining" and the newly proposed CS 401 "Evolutionary



Computation." Students working in the ML-LAB currently include Christina Douglas, Kasthurirangan (Praveen) Parthasarathy, and Ben Doering. One specific approach they are evaluating is computational immunology, where the design and development of intrusion detection systems is inspired by biological immunology.

INTERNET AND SENSOR DATA MANAGEMENT LAB



Dr Sanjay Madria and his students in the **Inter**net and Sensor Data Management Lab (ISDM) are working on a handle different data variety of projects including: Secure, Survivable and Adaptable Sensor Networks: Those working in this area are focused on two major tasks. The first deals with a network's ability to be robust in transferring multimode data fusion as well as flexible in recon-

figuring both network interconnection and data collection policy. The group is working on a wireless net-

work architecture that will design a routing protocol that will use the hierarchical topology to transfer requirements at multi levels. The second task deals with developing systems that can survive unexpected failures or malicious attacks. Change Management of Web Data (Funded by UM Research Board): The Web offers access to large amounts of heterogeneous information and

contains a mix of many different data types. In this project, the focus is on mining changes to Web data (also called web deltas). This is a challenging problem because information sources in the Web are autonomous and typical database approaches to detect and mine these changes are not usable. Cooperative Query Processing with Semistructured Data: Querying semi-structured data, such as that found on web pages, poses several challenges. Due to the lack of structure, traditional database query languages do not work.

XML Data Integration: XML has become the de facto standard protocol for information exchange for e-commerce and many workgroup applications such as Enterprise Resource Planning (ERP). The availability of large amounts of heterogeneous distributed web data necessitates the integration of XML data from multiple XML sources. This group is developing an XML schema integration methodology and a querying mechanism that supports easy integration and the querying of related but heterogeneous schemas.

2002 ANNUAL 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 Tuesday, September 17, 2002. Matt Johnson, Patrick Johnmeyer and John Wilson represented Boeing. Approximately 200 CS students, faculty and staff attended the get together.

ASSOCIATION FOR COMPUTING MACHINERY (ACM)

UMR-ACM: 40 years and growing!

This year UMR-ACM is celebrating its 40th year on campus! That's right, the second oldest student ACM chapter in the United States is now 40 years old. (By the way, that makes us five years older than the Computer Science Department itself!) We've already had an incredible year, with our 6th annual Graphics on the Grass demonstrations and various speakers on a myriad of topics from REST vs. SOAP to Seek42, a local web search service. This year UMR-ACM is supporting four special interest groups! With DevThugs coming back from last year (the people who are working on the Torque gaming engine), we've added on SIGSecurity (covering all aspects of computer security), SIGLaserTag (Comp. Sci's have to exercise too), and SIG.NET (run by our local Microsoft Student Ambassador). In the coming semester, we have no less than three major events scheduled to take place, from super gaming nights to the first annual UMR-ACM conference. And as always, we'll have a big presence at the Blue Key Block Party. For more information on ACM and all our activities, you can go to: http://acm.cs.umr.edu.

ALUMNI/FRIENDS LISTSERV

The Department is in the process of creating a listserv containing the names and e-mail addresses of UMR CS alums and friends. The listserv will be used by the Chair of the Department to keep participants informed about Departmental activities. If you would like to be added to the listserve, please send e-mail to csdept@umr.edu.

HOMECOMING 2003

The 2003 UMR Homecoming will be held on October 10-11, 2003. The Department is interested in knowing if you would like to have us put together a departmental activity for that weekend. If so, please let us know of your interest and any suggestions you have for such an activity. Dr. Ercal has agreed to organize this activity. Please contact him at ercal@umr.edu.

ROLLA NIGHT AT THE ENGINEERS CLUB IN ST. LOUIS



Mr. Clayton Price (Freshman and Transfer Advisor), Dr. Jennifer Leopold, Mark Schisler (Computer Science Student Ambassador) and Dr. Ralph Wilkerson, recruiting at the October 2002 Rolla Night at the Engineers Club in St. Louis.





Phonathon Dates: February 5,6,7,10,11,12,13,16 & 17



INSTRUCTIONAL PROGRAMS

Distance Education:

The Department continues to offer many of its junior/senior and graduate level courses through UMR's distance education facilities. Remote students view the classes through streaming internet video while being connected by telephone to class discussions. Since many of our remote students are working professionally, having both local and remote students in the same classroom provides unique opportunities for learning. Class notes and handouts are provided on the instructor's web site. Lectures are archived so they may be reviewed at any time.

In some cases, adjunct instructors in St. Louis originate classes through the UMR Engineering Education Center in St. Louis (EEC). Students on the UMR campus meet in electronic classrooms that support two-way audio and video communication. This allows St. Louis students to be "local" while campus and others are distance students. This has worked extremely well in allowing the Department to hire professional, practicing computer scientists to teach classes. We currently have two individuals from St. Louis, Dr. William Bond, a software engineer and group leader at Boeing, and Mr. Randy-Canis, a patent attorney from Greensfelder, Hemker & Gale, P.C., that are teaching classes for us this semester.

Our distance education courses continue to be advertised as part of the Systems Engineering Program in UMR's Engineering Management Department; however, they are available to anyone. You can view our current activities by going to http://www.umr.edu/~syseng/. A committee of CS faculty is currently looking at offering the entire CS MS degree program over the internet.

Graduate Certificate Programs:

The Department currently offers two graduate certificates, one in Software Design & Development and the other in Multimedia and Information Systems. Each program provides a four-course sequence of graduate courses that give students an opportunity to increase their knowledge in specific areas. Successful completion of the courses with a "B" or better qualifies the student for entrance into the CS MS program. Additional information can be found on our web page at www.cs.umr.edu or by contacting Dr. Bruce McMillin, our Graduate Coordinator at ff@umr.edu.

COMPUTER SCIENCE AMBASSADORS

The Computer Science Department has formed a new group, the CS Ambassadors, to accompany and help faculty members with various recruiting events. This group of selected undergraduate students volunteers to attend events on and off campus aimed at recruiting potential freshmen and transfer students. Current members are Derek Gaston, Robert Hicks, Mark Schisler, Omeregie Orobosa and Eric Sigler. The ambassador's job is to mingle with the visitors so that they are given the opportunity to talk with a current undergrad about the college, the program, the atmosphere, the job opportunities, the department, the faculty, the students, etc. Their presence at these events complements the presentations given by faculty members. So far, the results show wonderful promise and we are extremely appreciative of the time given to the Department by these students. Thanks!

IN MEMORIAM

It is with deep sorrow that we must tell you of the passing of Dr. John Hamblen and Dr. John Prater. Dr. Hamblen served as Chair of the Department from 1972 to 1981. He and his wife, Marianne, were living in Columbus, Indiana when he passed away on September 5, 2002, at the age of 77. During his time as Chair, the Department hosted two international ACM conferences in St. Louis. At the first conference, the Department's programming team won first place in the International ACM Student Programming Contest! Before leaving UMR, John started a scholarship fund that continues to help our students.

Dr. John Prater received his PhD from the Department in 1970. He served as Associate Professor of Computer Science at UMR until his retirement in August 1996. Prior to his 26 years at UMR, he worked on the Apollo Moon Project and was instrumental in starting the Computer Science Program at Southwest Missouri State University in Springfield, MO.

Their interest in and support of the Department and its students, both while they were at UMR and during their retirement, will be missed. We are indeed blessed to have had them as part of this Department.

ALUMNI NEWS

Brian Jenkins is currently an IT at Applebee International and is having lots of fun. I hope the new schools of Computer Science are going well.

John M. Brown and his wife had twin boys 2/20/02 (Joshua and Jacob). They now have three boys including the oldest son John, Jr.

Curtis Michael Schroeder is having a blast working with state-of-the-art tools for doing real-time visual simulation for cockpit simulators since 1999.

Stanley Benson Lindesmith is designing and developing java applications, servlets, and portlets. He has two wonderful daughters (ages 3 and 8). His wife, Lisa (UMR Life Sciences 1990), is now working at the University of North Carolina at Chapel Hill.

Carla Cecilia Parodi-Hall reports that Mallory Ann Hall was born on October 11, 2001. She joins big sisters Cassidy, 4 ½, and Sydney, 3.

Mark K. Post is co-author of an IBM Redbook repeat speaker on Linux/390 at SHARE.

Janet M. King is now teaching computer classes to grades 1 through 8 at her son's elementary school.

James G. Wylie recently changed jobs to Director of IT for Wellborn Cabinet, Inc.

Janice E. Breidert reports that her son, Stephen Breidert, is now a UMR freshman majoring in Computer Engineering and Mathematics.

William O. Gooch, Jr., moved to Colorado. Hillary graduated from Mizzou '01. Billy's a freshman at Colorado School of Mines, Golden. Still in love with Valerie.

Dr. James S. Jones reports that he left his tenure-secure CS Graceland faculty position 3 years ago to work for Icon Labs, creating SNMP agents and other embedded systems. He gets to collaborate with experienced engineers and quick younger minds. Each new project has steep learning curves, unreasonable deadlines, and different OS/language requirements. He loves it. It keeps him young. That is important in this industry, especially for us 50-somethings.

David W. Brewer is still developing Oracle Database systems.

Pat Oscar Bischel reports that he is in his 15th year at Lexmark. Currently he is working in a team leader position in product development. He and his wife stay busy with their five children and their 5 acre farm in horse country, north of Lexington.

Dr. Donald L. Gaitros was recognized for distinctive service in the School of Engineering and Computer Science and designated as an outstanding Professor at the May 2000 commencement at Baylor University.

Ana Juarez is enjoying life as a single mom of her 11 year old son Austin and her 7 year old daughter Larysssa.



Phonathon Dates: February 5,6,9,10,11,12,13,16 & 17



Computer Science Phonathon

Computer Science alumni pledged \$42,451 to the Department and sent in \$41,076 in actual gifts. Thank you for your generosity!

The average gift of \$101 surpassed last lat year's average gift of \$94. This is the second largest average gift in the Department's history. The record average gift of \$105 was established in 1998-99.

Thanks to alumni gifts to the phonathon last year, the Computer Science Department awarded several scholarships, developed internet software and web-courses, supported student activities, including the ACM and UPE chapters and the ACM programming contest, and upgraded some of the equipment in our computer laboratories.

"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 haven't already started to contribute on an annual basis through the Phonathon, please make this your year to start. We appreciate all gifts of all sizes. When they're pooled together, each gift makes a positive difference."

This year, we will begin calling our alumni Feb. 5. When the phone rings, please take a moment to share some of your Rolla experiences with a current student, and say, "Yes," when asked for a pledge. Taxpayer support accounts for less than 40 percent of the university's revenue, making your contribution a vital ingredient in the revenue pie. In this time of decreasing budgets, your gift is especially important.

We would like to express our appreciation to all businesses and individuals who gave to the Computer Science Department between December 1, 2001 and November 30, 2002.

COMPANY DONATIONS

Accenture

Anheuser-Busch Foundation

Avaya Communication

BASF Corporation

BP Foundation, Inc.

Beckman Coulter, Inc.

Boeing Company

Boeing/McDonnell Douglas Foundation

Caterpillar Foundation

Citigroup Foundation

Compaq Computer Corporation

Computer Associates

DST Systems Inc.

Ford Motor Company

Garmin International, Inc.

General Electric

General Motors Foundation

Hallmark Corporate Foundation

Harris Foundation

IBM

Lexmark International, Inc.

Lockheed Martin Corporation

Lucent Technologies

MasterCard International Inc.

McKesson Foundation, Inc.

Microsoft Corporation

Mid America Dental

Motorola Foundation

National Computer Systems

Nestle Purina PetCare Company

Olin Corporation Charitable Trust

PepsiCo Foundation

Phillips Petroleum Foundation

Raytheon Company

Reuters America Inc.

SBC Foundation

Southwestern Bell Corporation

Sprint Foundation

Texas Instruments Foundation

USG Foundation

Union Pacific Corporation

Union Pacific Foundation

Union Pacific Railroad

Verizon Foundation

COMPUTER SCIENCE PAGE 11

DONATIONS FROM ALUMNI & FRIENDS

Less Than \$100.00

| 20 55 211411 \$100.00 | | | | | |
|-------------------------------------|------|--------------------------|------|------------------------------|------|
| Altheide, Phyllis | 1985 | Crume, James L | 1981 | Hilleary, Alexander L | 1976 |
| Anderson, Glenn R | 1973 | Daniel, Kathleen M | 1979 | Hilleary, Cynthia S | 1976 |
| Arbesman, Gordon Gary | 1994 | Danz, Steven William | 1987 | Hillhouse, Michael D | 1975 |
| Ashabranner, David B | 1983 | Daum, Marilyn S | 1980 | Hilliard, Anthony Wayne | 2000 |
| Ashwell, Tracey Dawn | 1995 | Debner, David E | 1968 | Horstmann, Paul W | 1973 |
| Austin, Christopher L | 1986 | Derryberry, Darrell W | 1985 | Hughes, Jason Michael | 1995 |
| Baran, Barry Anthony | 1982 | Drewes, Laurie Ann | 1985 | Jacobsmeyer, Julie Ann | 1986 |
| Baron, Timothy J | 1979 | Dugan, Maureen Alane | 1981 | Jedlicka, Marla Irene | 1987 |
| Batcheler, Joseph Edward | 1995 | Dunford, Randall B | 1974 | Jenkins, William W | 1978 |
| Becker, Kathryn A | 1976 | Dziedzic, Charla C | 1983 | Jenness, Jeffrey Wayne | 1988 |
| Behrens, Marya Therese | 1986 | Edmondson, L Vincent | 1985 | Johnson, Kenneth G | 1969 |
| Biggers, Bradley Brian | 1991 | Edwards, Harry K | 1964 | Jones, Keith Norman | 1984 |
| Biggs, Roger Earl | 1987 | Ellis, Michael G | 1985 | Juarez, Ana Maria | 1984 |
| Birdsell, Clifford J | 1982 | Erickson, Christina K | 1975 | Kelley, David D | 1977 |
| Bischel, Pat Oscar | 1987 | Evans, Jesse D | 1965 | Kern, Steven Gerard | 1992 |
| • | 1971 | - | 1903 | King, Janet M | 1992 |
| Boevingloh, Gayle L | 1971 | Farley, Mary Ann | | O . | |
| Bohn, Ellen B | | Farley, Stanton K | 1978 | Kleekamp, Kurt Richard | 1987 |
| Bollinger, Terry B | 1977 | Feltmann, Jennifer Annet | 1988 | Krasche, Michael Gary | 2001 |
| Breidert, Janice E | 1973 | Foehrweiser, Roger Keith | 1987 | Krasner, Herbert C | 1973 |
| Brenneke, Kenneth J | 1978 | Folta, Joseph E | 1976 | Kuebler, Kenneth L | 1970 |
| Broeker, Mark James | 1987 | Ford, Raymond F | 1970 | Kuhn, Catherine M | 1976 |
| Brown, Daniel J | 1974 | Frager, Alan R | 1974 | Kunz, Frederick L | 1978 |
| Brown, John M | 1985 | Francis, David H | 1975 | Langan, Robert Paul | 1986 |
| Bruhn, Kurtis Matthew | 1987 | Gaitros, Donald L | 1966 | Langer, Richard B | 1983 |
| Brune, Charles D | 1978 | Galli, Donald H | 1974 | Laufman, Anne E | 1983 |
| Brusati, Patricia L | 1987 | Gantner, Thomas J | 1979 | Lawson, Lessa R | 1977 |
| Bryson, Dale M | 1970 | Gebhardt, Thomas V | 1978 | Leach, David Bruce | 1996 |
| Buckley, Jared Roger | 1996 | Gieseking, Paul E | 1973 | Leftridge, Gary Edward | 1999 |
| Bumgardner, Gregory | 1983 | Gilbert, Alice Fern | 1984 | Lei, Gin Yu | 1984 |
| Cameron, Jill Alison | 1984 | Gill, Christopher David | 1997 | Lenz, Richard G | 1974 |
| Cates, Carolyn Jane | 1985 | Goetting, Karla L | 1984 | Liao, Ruijia | 1996 |
| Clifton, Arlene K | 1972 | Gordon, Kevin Michael | 1983 | Lindesmith, Stanley Benson | 1990 |
| Cochran, Stephen Anthony | 1992 | Graham, David Brian | 1983 | Lindstrom, John A | 1973 |
| Codespoti, Daniel J | 1974 | Grant, Michael Joseph | 1985 | Little, R Wayne | 1989 |
| Coffman, Mary B | 1978 | Grotefendt, Judith R | 1974 | Loesch, Janet L | 1980 |
| Cole, Jon R | 1972 | Haines, Benjamin John | 1985 | Loesch, Terry L | 1980 |
| Compton, Laura Lynne | 1990 | Hall, Carla Cecilia | 1994 | Long, Leland L | 1959 |
| Cooper, Charles J | 1971 | Hall, Donald E | 1974 | Lorenzen, Stanley D | 1975 |
| Cordes, Glenn E | 1960 | Hampel, Richard G | 1977 | Lynch, Mark Bradley | 1981 |
| Cothern, Douglas K | 1978 | Harrington, Laura Ellen | 1983 | Madras, Mark J | 1978 |
| Cox, David Duane | 1983 | Hastings, R David | 1985 | Martin, Bennie F | 1986 |
| Cox, Patricia L | 1984 | Hayden, Bruce Jeffrey | 1983 | Maurseth, Vicky J | 1974 |
| Cox, Steven George | 1998 | Herman, Lynn Marie | 1987 | Mausshardt, Charles | 1983 |
| Cozad-Bolte, Raymond Joseph | 1997 | Herold, Lawrence W | 1974 | Mayberry, Mark Lane | 1987 |
| Crane, Lynn Anne | 1984 | Heydtmann, Dirk | 1993 | McAdams, Patricia A | 1977 |
| Craven, Paul Vincent | 1996 | Hickman, Lewis Lee | 1996 | McBride, Gregory C | 1975 |
| Cross, Janet Lea | 1986 | Hilke, David L | 1980 | McClenning, John Christopher | 1991 |
| Cross, vanot Lou | 1,00 | 111110, 124114 12 | 1700 | | 1//1 |

PAGE 12 COMPUTER SCIENCE

| McCormick, C Craig | 1968 | Schroeder, Curtis Michael | 1988 | Woytus, John Martin |
|-------------------------------------|------|---|------|---------------------|
| McKee, Richard H | 1974 | Segura, Lynn Kathleen | 1987 | Wren, Frances K |
| McLaughlin, Ellen Couvillion | 1989 | Serban, Cristina | 1993 | Wuthnow, Debbie Ann |
| Menkel, Phillip Louis | 1998 | Shaffer, Russell C | 1969 | Yarnall, Charles F |
| Messmer, Kevin Michael | 1988 | Shelden, Kathleen A | 1979 | Yu, An-Chi |
| Mills, Andy Ray | 1989 | Shi, Yuning | 2000 | Ziaja, Kathryn Ann |
| Mitchell, Deborah Gay | 1984 | Shoemaker, Kevin A | 1999 | |
| Monsees, Robert L | 1970 | Sisko, Bruce Peter | 1987 | |
| Morrison, David W | 1967 | Smith, Johanna Marie | 1985 | |
| Moutrie, Chester L | 1968 | Smith, Steven Murphy | 1990 | |
| Murphy, Frederick | 1982 | Sorrell, Scott Alfred | 1992 | 600 |
| Nagawiecki, Gregory Edwin | 1984 | Stager, Scott P | 1970 | |
| Nayar, Sanjay | 1993 | Stahl, Joseph W | 1969 | |
| Neary, Brian Lewis | 1991 | Stalnaker, Kevin W | 1979 | _ |
| Nelson, Gary W | 1987 | Starbuck, Jason Leon | 1997 | 17 |
| Nichols, Byron K | 1973 | Steelman, Rhonda L | 1984 | 8 |
| Oakes, Jack L | 1990 | Steiner, Robert M | 1978 | ~ |
| Oldroyd, Juanice E | 1983 | Stone, Barry N | 1978 | 7 |
| Olmstead, Sheila M | 1985 | Stratman, Curtis Steven | 2001 | 3,1 |
| Ortbals, Robert J | 1978 | Swisher, Dean O | 1970 | Ę |
| Osborne, Carol Jean | 1985 | Swoboda, Scott Alan | 1994 | 2 |
| Owensby, Roger Wayne | 1986 | Tadda, George P | 1989 | <u></u> |
| Pace, Gary Glen | 1984 | Taylor, Charles Ray | 1973 | 7 |
| Pace, Randy C | 1975 | Thilker, Steven Lindell | 1991 | o . |
| Panapakkam, Anitha | 1994 | Thomas, Gary W | 1978 | Ę |
| Parrett, Minh T | 1979 | Thorsell, Carl W | 1969 | 5,6,9,10,11,12,1 |
| Peetz, Bryan Dale | 1983 | Treptow, Eric B | 1981 | '9 |
| Peterman, John W | 1984 | Turley, Matthew Linwood | 1992 | Ω΄ |
| Phillips, William Anthony | 1993 | Uebele, Cynthia A | 1982 | > |
| Pile, Thomas N | 1979 | Uher, Donald L | 1975 | February |
| Plag, Darlene Gail | 1981 | Underwood, Diane E | 1981 | 2 |
| Post, Mark K | 1978 | VanDeven, John G | 1979 | ٥ |
| Puhl, Lisa Joan | 1982 | Vandergriff, Matthew Wayne | 1998 | Fe |
| Queern, John Kneedler | 1981 | Venezia, Kenneth Ray | 1982 | |
| Rafferty, Patrick V | | Wacker, Robert C | 1977 | .: :: |
| Reed, Rebecca S | 1981 | Walker, Joseph D | 1974 | Phonathon Date |
| Rehkop, Thomas G | 1974 | Walker, Rhonda A | 1977 | Ď |
| Reinhardt, Mary Jane | 1986 | Webb, Johnny S | 1971 | |
| Ressler, James Louis | 1986 | Wegman, John L | 1975 | Q |
| Richards, James L | 1972 | White, James J | 1974 | ÷ |
| Richesson, Jennifer Jo | 1994 | Wieberg, Peggy A | 1986 | B C |
| Robertson, James Douglas | 1967 | Wigington, Thomas Scott | 1997 | ō |
| Robinson, Sally J | 1987 | Winebright, George M | 1980 | ₹ |
| Santos, Carmela Rosario Cobarrubias | 1996 | Winfield, Scott B | 1973 | _ |
| Sauer, David Bernard | 1986 | Wipke, Timothy Albert | 1988 | |
| Schafale, Richard G | 1973 | Wiseman, Susan Marie | 1987 | |
| Schaper, Gary E | 1993 | Wittmaier, Charles Walter | 1996 | |
| Scheer, John Albert | 1988 | Wolters, David J | 1970 | |
| Schmidt, Lonnie D | 1969 | Wood, Elizabeth J | 1984 | |
| Schneider, Susan | 1982 | Wood, Elizabeth 3 Wood, Richard William | 1987 | |
| Schoenefeld, Karl F | 1972 | Work, Paul R | 1990 | |
| Schoolicicia, Ixaii i | 1714 | ii oik, i uui k | 1//0 | |

COMPUTER SCIENCE PAGE 13

| More Than \$100.00 | | Hellrich, James H | 1973 | Rothschild, Susan H | 1974 |
|-----------------------------|------|---------------------------|------|--------------------------|------|
| | | Hicks, Richard Jay | 1989 | Scherer, Keith W | 1982 |
| Abraham, Steven Charles | 1995 | Hilgers, Michael G | 1985 | Scherer, Kenneth Paul | 1982 |
| Abshier, John C | 1983 | Hirschbuehler, Daniel C | 1980 | Schmutzler, Allen J | 1977 |
| Adams, Steven Richard | 1982 | Hock, John R | 1982 | Shen, Chang | 1997 |
| Altmark, Alan Charles | 1982 | Hodges, John L | 1961 | Smith, Brian Lynn | 1987 |
| Androlewicz, Thomas R | 1977 | Hojnowski, James G | 1984 | Smith, Houstin G | 1981 |
| Asher, Gary Stephen | 1986 | House, Randy Lee | 1982 | Smith, Todd Walker | 1985 |
| Backer, Brian David | 1985 | Howard, Steven R | 1981 | Soda, Dominic C | 1986 |
| Bailey, Wayne P | 1976 | Hunsucker, Patricia | | St Clair, Daniel C | 1975 |
| Bardsley, Jeannine M | 1983 | James, David Loren | 1985 | Steffan, Cheryl A | 1969 |
| Beckmeyer, Margy A | 1973 | Jones, David S | 1964 | Stein, Michael S | 1986 |
| Belk, Paul Shannon | 1993 | Jones, James S | 1974 | Stevens, James Virgle | 1983 |
| Biermann, Scott Christopher | 1993 | Jones, Roger M | 1971 | Stratman, Mark X | 1973 |
| Blume, David J | 1964 | Judd, Dennis L | 1974 | Szygenda, Ralph James | 1970 |
| Boecker, Mark S | 1974 | Keep, Andrew William | 1999 | Tatum, Carolyn Joan | 1982 |
| Bortfeld, Mark K | 1979 | Kercher, Bruce Edward | 1999 | Taylor, Timothy Topper | 1987 |
| Bowles, Anthony Wayne | 1989 | Kleikamp, David John | 1986 | Tebo, Stephen D | 1968 |
| Brandon, Dwight W | 1983 | Klemmer, Susan H | 1966 | Tippin, Martin Allen | 1991 |
| Brewer, David W | 1969 | Lawrence, Jackie L | 1978 | Toombs, Howard L | 1976 |
| Burke, Terence Michael | 1995 | Little, Russell D | 1982 | Washburn, Ricky L | 1979 |
| Canis, Randy L | 1997 | Lovitt, John R | 1970 | Wasleski, Steven Francis | 1987 |
| Carson, David J | 1975 | Lyon, James S | 1972 | Watson, Lowell R | 1979 |
| Chen, Emy A-Mei | 1974 | Marshall, William K | 1984 | Weidler, Glenn R | 1977 |
| Chrisman, George F | 1969 | Maxwell, Shonie Christine | 1994 | Wickerham, Lawrence J | 1972 |
| Crenshaw, Robert J | 1974 | McBride, Sandra R | 1970 | Wildschuetz, Robert A | 1975 |
| DePauw, Thomas J | 1973 | McKenney, William A | 1972 | Windle, Daniel Ray | 1998 |
| Dearth, David W | 1968 | Meier, Curtis P | 1983 | Wurtzler, Daniel R | 1982 |
| Dimmick, Marijo | 1992 | Meng, Chun-Ping J | 1982 | Wurtzler, Pamela H | 1981 |
| Doerr, Jerry W | 1967 | Menke, Elaine A | 1973 | Wylie, James G | 1969 |
| Drake, Sandra Jo | 1993 | Mersinger, Rozann P | 1981 | Zlatic, Milton T | 1971 |
| Dupont, Steven J | 1974 | Montague, Michael W | 1973 | Ziatie, Wilton 1 | 17/1 |
| Eaton, William A | 1970 | Mount, William H | 1973 | | |
| Evans, William David | 1984 | Muldoon, Mary Ellen | 1991 | | |
| Feldmann, Robert C | 1980 | Musial, Christopher | 1982 | | |
| Fieseler, Catherine N | 1980 | Nau, Steven N | 1970 | of MISSO | |
| Fischer, Thomas W | 1976 | Nekorchuk, Russell L | 1970 | RESTLY of MISSON | R |
| Fitzgerald, Barton L | 1993 | Newcomer, John | 1989 | | TO . |
| Flachsbart, Barry | | Nordeng, Karen Squires | 1989 | | 75 |
| Freiberger, Keith | 1984 | Oellig, Galen R | 1988 | 18 | 70 |
| Ganofsky, John R | 1978 | Peterson, Richard R | 1985 | | 2 |
| Gavin, James Douglas | 1987 | Porter, David Bryan | 1988 | | |
| George, John Scott | 1972 | Potzmann, Kim J | 1970 | | |
| Gerlt, Robert Eugene | 1989 | Prater, John B | 1970 | | |
| Gerlt, William R | 1987 | Price, Clayton E | 1980 | | |
| Goertzen, Patrick H | 1982 | Pryor, Gary Alan | 1995 | | |
| Gooch, William O | 1985 | Randazzo, Vincent A | 1993 | | |
| Gordon, John Harrison | 1988 | Renken, Kenneth Bruce | 1989 | | |
| Hall, Allyson Taylor | 1997 | Rider, Adam Clinton | 1998 | | |
| Hankins, Judith A | 1980 | Rosselet, Susan Mary | 1993 | | |
| Hayes, Kevin Brian | 1988 | | 1983 | | |
| ,, 110 viii Diiuli | 1,00 | Roth, Michael G | 19/2 | | |

KEEPING IN TOUCH

Dr. Arlan DeKock retains his position as Professor of Computer Science but is currently serving as Dean of the new School of Management and Information Systems.

Dr. Fikret Ercal has been appointed to the UM Research Board for two years by UM President Pacheco. He received the IEEE Computer Society's Meritorious Service Award and was named an IEEE Golden Core Member in 2002. Dr. Ercal continues to serve as an associate editor for the International Journal of Parallel and Distributed Systems and Networks. Parallel processing, computer vision and bioinformatics are his research interests. He is the co-advisor for the UMR's programming team for the ACM Programming Contest.

Dr. Yongjian Fu is working on a project funded by Honeywell. He and his students are developing data mining software for telemetry data. He is also involved in the revision of the database course sequence (CS 238 and CS 304). In his spare time, he enjoys taking his son to local parks.

Dr. Michael Hilgers is having an exciting year as part of a large research initiative entitled "Advanced Virtual Environments for Training First Responders." This is a homeland security project designed to explore the use of virtual reality to train people who are first on the scene of a large terrorist attack event. He continues his research into blending scientific computation with modern software architecture. He is currently teaching the operating systems class. It has been a challenge, but one he has enjoyed. His courses on object-oriented numerical methods continue to attract a growing student base. Dr. Hilgers and his wife Lois were blessed with the birth of their son Benjamin Edwin-Paul Hilgers the week before classes started this fall.

Carleen "Corky" Humphrey is still keeping very busy with departmental duties. She enjoys her job very much and the people she gets to interact with every day. She enjoys spending time with family and friends, especially her 5-year-old grandson, Briar.

Dr. Frank Liu continues his research collaboration with Toshiba Corporation on software quality planning and management. He teaches data structures, software testing and quality assurance, and advanced software engineering.

Dr. Sanjay Madria is involved in designing and teaching courses in database systems, XML and web data management, and mobile computing. Dr. Madria and his students have published a number of original research papers in numerous prestigious conference proceedings and archival volumes. He is active in the distance education offerings we offer. When he is not writing, teaching, or directing research, he enjoys spending time with his family.

Dave Mentis continues to teach CS 53 (Introduction to Programming in C++) and CS 158 (Discrete Math). He is still involved in the Department's computer systems administration. He and his family live on their farm in the country and are always involved in a variety of projects.

Dr. Ann Miller, the Cynthia Tang Missouri Distinguished Professor of Computer Engineering, holds a joint appointment with CS. During the past year, Dr. Miller has been elected as Chair of the NATO Information Systems Technology Panel and was elected to the Administrative Committee of the IEEE Reliability

COMPUTER SCIENCE Page 15

Society. She continues to serve as Associate Editor for Software Management for IEEE Software. On campus, Dr. Miller's Trustworthy Systems Laboratory has been expanded; the facility, housed in room 211 of the Missouri Enterprises Innovation Center, 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. She continues to be involved in pure breed dog rescue. The newest member is a Russian wolfhound that has striking black and white coloring on her head. She has been named Morticia in honor of Morticia Addams. The hounds have their own webpage: www.borzoi.net/moondance/

Clayton Price continues to teach sections of CS 53 (Intro to Programming in C++) during the regular semesters and CS 228 (Intro to Numerical C++ Methods) in the summer sessions. Mr. Price was instrumental in the development of CS 54, a new laboratory course that accompanies CS 53. Advising the freshmen and transfer students keeps him hopping during pre-semester sessions and pre-registration weeks. It is clear that he enjoys working with students and that they enjoy working with him.

Clayton says that, "The most significant change in my life this year is my marriage to Tülin. We were married in August in Istanbul, Turkey, on the waterfront of the Bosporus. We spent our honeymoon in Tunisia, a small country in northern Africa. I have acquired a new family and a new culture. Life just gets more interesting. For my wife, life is full of surprises as she has moved from a city of 15 million to a town of 15 thousand."

Dr. Chaman Sabharwal teaches courses in Analysis of Algorithms and Graphics and Java Visualization. He still commutes back and forth from St. Louis.

Denise Sharp is the first line of defense for the office and brings cheer to everyone she greets. Students and faculty appreciate her wonderful sense of humor and her words of encouragement. Most of her time outside the office is spent with her grandson, Cody.

Dr. S. R. Subrmanya developed a new graduate level course titled "Computer Security" which was offered for the first time in the Winter 2002 semester. The course will again be offered in the Winter 2003 semester. During the fall semesters, Dr. Subra has been offering the Multimedia Systems course that he has developed. He was invited to present tutorials on multimedia and security at a few conferences recently.

Dr. Ralph Wilkerson was named Associate Dean of the College of Arts and Sciences in the Fall 2002 semester. In addition to his new duties, he continues to teach and advise students in the Department. His research interests are in the areas of artificial intelligence and algorithms. He had an unsuccessful hunting trip to Colorado, though he did see a bear up close and personal! He has had much better luck bow hunting in Phelps County.

Dr. Franck Xia teaches courses in Software Engineering and Programming Languages & Translators, His interests are Software Engineering, Digital Topology/Geometry, Pattern Recognition/Computer Vision and Information Systems.

UNIVERSITY OF MISSOURI - ROLLA COMPUTER SCIENCE

325 Computer Science Building 1870 Miner Circle Rolla, MO 65409-0350

Phone: 573-341-4491 Fax: 573-341-4501 Email: csdept@umr.edu



Visit us on the web: http://www.cs.umr.edu

NONPROFIT ORG. US POSTAGE PAID PERMIT NO. 170 Rolla, MO

