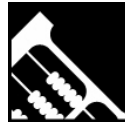




Abacus++



Summer/Fall 2005

A Newsletter of the Department of Computer Science

Commencement Reception



On the morning of Spring Commencement, May 7, 2005 the department hosted its annual breakfast reception for graduating students and their families. Wil Davis, President and CEO of Ontario Systems, was the invited speaker. The reception was attended by about 50 students, family members, graduate assistants and faculty. Exceptional students and graduate assistants were honored with awards and certificates of appreciation.

Mr. Davis presented an inspirational lecture on working in the industry and the importance of innovation in information technology. Ontario Systems has been a benefactor of the department for many years. Many of our graduates are employed there full-time, while others have worked as interns. Ontario Systems has sponsored multiple departmental events, is an active SERC affiliate, and has funded a two-year research project on design metrics.

See Graduates, pg 2

New Faculty Member, Paul Gestwicki



The department is pleased to welcome Dr. Paul Gestwicki who joined us in Fall 2005. Paul earned his Ph.D. in Computer Science and Engineering from the University at Buffalo in June 2005. The title of his dissertation was "Interactive Visualization of Object-Oriented Languages." His research interests include object oriented languages and implementations, interactive program visualization, graph drawing algorithms for class, object, and sequence diagrams, and computer science education. He has presented his work at the ACM Conference on Object-Oriented Programs, Languages, and Applications; IEEE Symposium on Human-Centric Computing, Languages, and Environments; and International Conference on Discrete Mathematics and its Applications. He has taught undergraduate and graduate courses including introduction to computer science, data structures and algorithms, programming languages, database systems, knowledge representation and reasoning, and computer literacy.

Conference Room Update

Members of the Resources Committee have been working on plans to renovate and enlarge our conference room. Included will be state of the art projection and communication equipment. We are presently waiting to hear from Facilities Planning and Management regarding the timetable.

Graduates



The department congratulates the following students who received their degrees in December 2004, May 2005, or July 2005. Some have decided to attend graduate school at Ball State University or other institutions, while others have received offers of employment in industry.

BACHELOR OF SCIENCE

Christopher Brown	Cory Leas
Vincent Buck	Seth Lemons
Todd Chaffins	Jeffrey McHolland
Brandon Coppernoll	Robert Miles
Renee Dickerson	Joseph Miller
Daniel Durham	Matthew Nederhood
Joseph Frederick	Timothy Nolan
Merrill Gourley	Troy Oliveira
Kenton Hankins	Justin Rhinesmith
James Howell	Bryan Ritz
Brandon Johnson	Robert Seaton
David Jones	Ryan Shell
Cory Keeler	Dustin Veteto
Ryan King	Mark Yan

MASTER OF SCIENCE

Mohammad Almalag	Christopher McDonald
Rajesh Arumalla	Cheng Qin
Swati Boddapati	Amitai Sasson
Mark Caravello	Keith Shook
Anthony Cox	Ramaraj Thiruvarangan
Scott Haerr	Thong Tran
Tzu-Hsuan Huang	Archana Turumella
Jae-Hyung Lee	Natraj Vannavada

Dean's Honor List

The department congratulates the following students who earned the academic distinction of being named to the Dean's List for Spring and Summer 2005.

John Abbott	Adam Gray	Joseph Morris
Phillip Benages	Kenton Hankins	Matthew Nederhood
Kyle Beverforden	Brent Headland	Nicholas Neverson
Thomas Carlton	James Heuston	Joshua Nunez
Todd Chaffins	Kyle Huffman	Troy Oliveira
Joshua Cochran	Cory Keller	Martin Osterman
Trevor Collins	Paul Larimore	Aryan Peymani
Brandon Coppernoll	Cory Leas	Benjamin Sample
Jonathan Cummins	Seth Lemons	Larry Wade
Jeffrey Cunningham	John-Michael	Jonathan Wagner
Matthew Duncan	Nicholas Meyer	Graham Watson
Charles Estell	Joseph Miller	
Trey Gourley	Eric Morgan	

Graduate Assistants, Fall 2005

The following students have been awarded graduate assistantships for the Fall 2005 semester. Some will assist in lab instruction and grading; others will join research teams.

Mandeep Atwal	Tao Lu
Prathima Bommineni	Gopinath Manchineella
Todd Chaffins	Bryan Ritz
Karlene Clapp	Hsiao-Ying Su
Benjamin Dean	Sunita Upadrasta
Tai-Lin Han	Vamshi Yedulla
Jerry Jeffers	

Student News

Todd Chaffins and **Seth Lemons** completed an Honors Thesis entitled *Investigating the Security of RSA Encryption through Genetic Programming* under the guidance of Vinayak Tanksale.

Three teams of Computer Science students participated in the 2004 *ACM East Central North America Regional Programming Contest* under the guidance of Grant Slagle.

Gopinath Manchineella, **Milind Sakaria**, **Sunita Upadrasta**, and **Mohan Varanasi** presented the Jeopardy game at the SERC Spring 2005 Showcase. The game was designed and developed as their Software Engineering (CS 697) project.

Faculty Accomplishments

Jay Bagga published a paper in the International Journal of Mathematics and Mathematical Sciences; worked on a Knowledge Management Project sponsored by Center for Media Design; gave a seminar at United Nations University – International Institute for Software technology in Macau, China; presented papers at the MIGHTY XL Conference, and the International Conf. on Graph Theory, Combinatorics, and Computing; attended a workshop hosted by the US Department of Homeland Security; chaired a Session at the International Conf. on Graph Theory, Combinatorics, and Computing; served on the 2005-06 Fulbright Peer Review Committee for African Research Scholars, served on the Program Committee of the International Colloquium on Theoretical Aspects of Computing to be held in Hanoi, Vietnam during October 2005; and served as an external reviewer of two Ph. D. Theses from Annamalai University, India.

Paul Buis developed CheckML, a checklist-based software quality measurement tool using XML and RMIFS, A Java RMI-based file system; presented at the SERC Spring Showcase.

Samuel Hsieh published a paper in the Journal of Computing Sciences in Colleges, presented a paper at the 11th Consortium for Computing Sciences in Colleges Central Plans Conference.

Christian Lürer is a member of the program committee for the 31st Euromicro Conference on Software Engineering and Advanced Applications, Component-Based Software Engineering Track; presented a paper at the Ball State University Teaching and Learning Conference 7; presented at the SERC Spring Showcase.

Michael McGrew is a CO-PI (with John Emert and Giray Okten) on Lilly III Grant to develop on-line course planning software to assist with student advising; presented papers at the AMS Special Session on Graph Theory, and MIGHTY XXXVIII.

C. Van Nelson presented papers at the American Educational Research Association, and the National Association of Graduate Admissions Professionals.

Frank Owens presented papers at the Thirty-Sixth South-eastern International Conference on Combinatorics, Graph Theory and Computing; and MIGHTY XXXVIII.

Fu-Shing Sun presented a paper at the Sixth SCIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing (SNPD 2005); was a session chair at SNPD 2005; served on the Program Committee for SNPD 2005; served on the Program Committee for the 2005 International Conference on Communication, Network and Information Security; and reviewed papers for SNPD 2005, The IASTED International Conference on Networks and Communication Systems (NCS 2005), The IASTED International Conference on Internet and Multimedia Systems and Applications (EuroIMSA 2005).

Chun-Hung Tzeng was awarded a BSU Faculty Grant on Network Security; presented at International Conference for Engineering Education and Research (iCEER-2005).

Sun and Tzeng presented papers at the 2005 International Conference on Security and Management, and the International Conference for Engineering Education and Research (iCEER-2005); developed software on network intrusion detection; presented a corresponding paper at the 2005 SAM Conference.

Vinayak Tanksale was awarded the Lumina Research Grant — Sustaining Learning In Core Curriculum and Early Major Courses, presented at the SERC Spring Showcase and resubmitted a grant proposal to the NSF Cyber Trust program.

Sheri York worked as consultant for University Computing Services in Linux Administration and parallel programming and for J.P. Morgan Bank One Data Center in Solaris Administration; presented a lecture for Altrusa Women's Club on the topic of protecting privacy on the Internet.

Dolores Zage made three presentations at the University of Limerick, Ireland.

Wayne Zage served on a panel reviewing software engineering research initiatives at the University of Limerick for Science Foundation, Ireland.

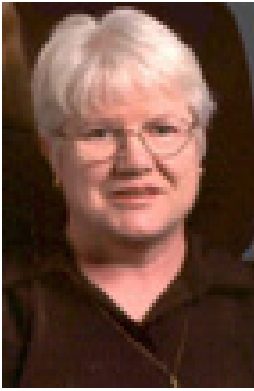
Dolores and Wayne Zage published a paper in the Proceedings of the Anti-Tamper 2005 Conference; made a presentation to Arxan personnel; made two presentations and developed and delivered a 10-hour global software testing workshop at the University of Limerick, Ireland; organized a video conference between the Center for International Programs at BSU and its counterpart at the University of Limerick; organized the Software Protection Evaluation Course (SPEC) presented at Ball State University by Arxan personnel; submitted a proposal to the US Army Research Lab; presented at the SERC Spring Showcase.

Jeff Zhang published a paper in the Proceedings of the International Conference on Digital Environments, resubmitted grant proposal to the NSF Cyber Trust program, and presented lectures at Shandong Physical Education Institute, Shanxi Normal University and Xian Army Technology Institute in P.R. China.

SERC Spring 2005 Showcase

The Software Engineering Research Center (SERC) Spring Showcase was held at Purdue University on June 16-17. Eight universities (including University of Limerick, Ireland) and nine SERC industrial affiliates (including the newest affiliate Arxan Technologies) participated. Presentations included technical talks, posters, and software demonstrations. Please visit <http://www.serc.net> for more details. The Fall SERC Showcase is scheduled for November 16-17 at Ball State.

Faculty News



Mrs. Gail Green, Instructor of Computer Science, has accepted a position with Ontario Systems after 22 years of teaching in the Computer Science Department. Her greatest area of interest has been teaching technology for the classroom, including the use of robotics as a programming teaching tool. Over the years, she coordinated and taught several robotics seminars using Lego robots and the Mindstorm “Robo” programming platform. She is noted for her enthusiasm and energy, often waking her 8:00 am students by playing loud lively music before the class. Gail’s service to the University extended beyond the classroom and the department. Gail’s contributions to departmental committees, event planning, and student activities will be missed. She continues to serve as a Girl Scout leader and actively supports the Burris band and volleyball team. For many years she donated proceeds from the sale of zip disks to various student organizations. During the past four years, she served as a co-sponsor of the local student chapter of the Association of Computing Machinery (ACM). Gail’s absence in the department is felt by colleagues and students alike, and we wish her the best.



Mr. Grant Slagle, Instructor of Computer Science, has joined Ontario Systems after a year of teaching in the Computer Science Department. Grant taught introductory computer literacy and discrete mathematics courses in computer science. He is especially interested in computer security, and he developed a network packet sniffer for wired as well as wireless networks. He led three teams of computer science students at the ACM Regional Programming Contest. We wish him good luck in future endeavors.

Visiting Scholars



The department is happy to host two visiting scholars this Fall -- **Lam Quang Vu** from Vietnam and **Charles Mwabu** from Kenya. They are sponsored by the exchange program between Ball State University and United Nations University’s International Institute for Software Technology (UNU-IIST). Both visiting scholars will be involved in collaborative research with various department faculty. They will attend several computer science classes and take part in other departmental and university activities. The department looks forward to a rewarding professional and cultural exchange with the scholars.



Independent Learning Program

Starting in Fall 2005, the department will participate in the Independent Learning Program (ILP) offered by the School of Extended Education of Ball State University. Students can earn a Bachelor of General Studies degree through the ILP by taking 10 week or 9 month courses. Several department faculty underwent ILP training in summer and the department is currently offering CS 104, Computer Literacy; CS 110, Introduction to Computers; and CS 236, Computer Database Techniques for the ILP. For more information, please visit <http://www.bsu.edu/distance/independent/>