

Computer and Information Science News October 2007 – April 2008
Spring 2008 Engineering Advisory Board Meeting
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The Department is constructing a virtualization cluster to support both instruction and research in network and operating systems technologies, visualization, and high-performance computing. The cluster includes four Dell Intel-based servers, each with dual quad-core processors, a Dell, Intel-based graphics workstation with a quad-core processor and NVidia GPUs, and a separate gigabit switch. It is being developed by Dr. Paul Ruth and other faculty in conjunction with graduate student Anthony Nocentino and other students. At the lowest layer, the cluster will support the Xen virtual machine monitor software with Linux and Windows operating systems and various tools and languages layered on top.

Other recent computer equipment purchases include two Windows computers for the Weir Hall classrooms, four Windows workstations for Graduate Instructors and other staff, a Toshiba laptop for faculty member Dr. Pamela Lawhead, and an HP color laserprinter for the Department office. There is a plan to purchase new Apple Mac laptop for faculty member Cynthia Zickos in the near future.

Network Administrator Anthony Nocentino resigned effective 28 March. Dr. Tobin Maginnis is chairing the search committee to identify potential replacements. We expect to have the position filled by June. An informal offer was made to an individual on 16 April.

MS student Chad Vicknair is a newly assigned Graduate Instructor this semester, teaching a section of CSci 191 (Office Applications). Vicknair is also the assistant network administrator.

The faculty is creating or reviving several courses or special topics this year. In Spring 2008, Dr. Yixin Chen and Dr. Conrad Cunningham revived the courses CSci 345 (Information Retrieval) and CSci 541 (Expert Systems and Logic Programming), respectively. In Summer 2008, Dr. Dawn Wilkins is scheduled to teach a revised topic on Internet Programming as CSci 581. In Fall 2008, Dr. Philip Rhodes is reviving the course CSci 391 (Computer Graphics), Cunningham is developing a new CSci 581 topic on Multiparadigm Programming using the new language Scala, and Dr. Pamela Lawhead is developing a new ENGR 691 topic on Game Design and Development.

In preparation for her Fall 2008 course, Lawhead attended a workshop on “Developing CS1/2 Programming Assignments on the Xbox 360 Console” on 12 March at the SIGCSE Technical Symposium in Portland, Oregon.

The faculty and staff are conducting the ABET/CAC self-study this year in preparation for the Fall 2008 visit. The faculty constructed a new set of assessment exams for the core courses in the Fall semester and a new alumni survey in Spring 2008. Conrad Cunningham attended an ABET accreditation workshop in Incline Village, Nevada, on 31 October to better prepare for the self-study and visit preparation. The self-study document is due at ABET headquarters by the end of June.

External seminar speakers this year include Dr. Gabriel Ferrer of Hendrix College, Dr. Xiaowei Xu of the University of Arkansas at Little Rock, Dr. Qishi Wu of the University of Memphis, James Mauro of Sun Microsystems, John Calvert of the US Patents and Trademarks Office, and Jerry Bell of Oxford Metamedia and Cytec Software. Speakers from the University of Mississippi include Dr. Kathy Gates, Dr. Yixin Chen, Dr. Conrad Cunningham, Dr. Tobin Maginnis, the IAEGS staff, James Church, Liang Huang, Baoqiang Yan, Derek Park, Xiaofei Nan, Arvinder Kang, and David Thigpen.

Dr. Pamela Lawhead, IAEGS, and the School of Engineering are hosting two summer workshops for teachers using the Department's student labs. On 9-13 June, the Learn to Program with Alice workshop will teach the basics of the Alice 3D authoring system. This will be followed by an Alice-related curriculum development workshop 7-11 July. These workshops are funded by the National Science Foundation's ITEST program and are part of a national effort to get Alice into the middle school/high school system. The teachers who are participating will be expected to return to their respective schools and teach Alice in the coming year.

IAEGS is also sponsoring a local robotics club for middle and high school students. MS student Aik Min Choong is helping the club members work with the Lego Robot systems in various projects.

The Department provided audiovisual and computer equipment to help support the Mathcounts competition in February. Anthony Nocentino, Chuck Jenkins, Conrad Cunningham, Lohith Odapally, and Shengnan Dou helped with equipment setup and breakdown and with administration of the competition.

PhD student Derek Park successfully completed the PhD comprehensive examinations in the September 2007 offering. PhD student and full-time instructor Charles Jenkins completed the comprehensive exams in the February 2008 offering.

PhD student Susan Lukose was awarded a Graduate School Dissertation Fellowship to enable her to focus on completing her dissertation during Spring 2008. Lukose, who should complete her PhD dissertation under Lawhead by summer, presented her dissertation work at the recent ACM SIGCSE Doctoral Consortium in Portland, Oregon.

Lukose also received one of the two Graduate Student Achievement Awards from the School of Engineering. The Department also nominated PhD student James Church for these awards.

The Department nominated senior Brent Roth for a 2008 Taylor Medal.

Senior Jason Boyd was inducted into the Ole Miss chapter of the Phi Kappa Phi Honor Society during its Spring 2008 ceremony on 3 April.

The Computer Science Honors award recipients for 2008 include Freshman Kurt Gavin, Sophomore Raymond Nnodim, Junior Brent Sharrow, and Senior Brent Roth. Roth is also awarded the Richard E. Grove Award for service.

On March 26, the Department's chapter of the Upsilon Pi Epsilon (UPE) honor society initiated the following new members for 2008: undergraduate students Samuel Joseph Hunter, Donald Brent Sharrow, and Austin Trey Harrison; graduate students Chad Michael Vicknair, Anthony Edward Nocentino, Suresh Kumar Chelamalla; and faculty members Paul Michael Ruth and Kristin Elizabeth Davidson (adjunct). New officers are Brent Sharrow, President; Trey Harrison, Vice-President; and Chad Vicknair, Secretary/Treasurer.

The \$500 Computer Science SAP Scholarship recipients for Spring 2008 are Aik Min Choong and Brent Roth. For Fall 2008, the Department awarded these scholarships to senior Meghan Oswald and MS student Chad Vicknair.

Several of the Department's students made presentations at the Mississippi Academy of Science meeting at Olive Branch on 20-22 February. These included undergraduate student Sufian Ahmad and graduate students Aik Min Choong, Liang Huang, Xiaofei Nan, Anthony Nocentino, Jianqing Sun, Sam Testa, David Thigpen, and Baoqiang Yan. MCSR staff member (and PhD student) Jason Hale and Dr. Paul Ruth accompanied the students on the trip. Mr. Yan won the award for the Best High Performance Computing presentation and Ms. Nan won the best Graduate Student presentation award in the Mathematics, Computer Science, and Statistics Division.

PhD students James Church and Xiaofei Nan presented at the ACM Mid-Southeast Fall Conference in Gatlinburg, Tennessee, November 15-16. For her presentation "NEUCHESS: An Implementation of Chinese Chess Computer Game," Ms. Nan won third place in the Student Presentation Awards in the Graduate/Masters category.

Three individuals and one pair of students from the Department submitted to the School of Business Administration's business plan competition. Two groups were invited to present and made it into the second of the three rounds. One submission was by PhD student James Church and another by a team of MS student Joseph Smith and senior Sufian Ahmad. Dr. Dawn Wilkins encouraged this participation by including an entrepreneurial component on the development of a business plan for a computing-related business idea.

The ACM student programming team, coached by Dr. Stephen Rice, is participating in the programming contest at the CCSC Mid-South 2008 conference in Russellville, Arkansas, on 4 April. Team members include seniors Brent Roth and Jason Boyd and MS student Courtney Humphries.

Graduate students Derek Park, Baoqiang Yan, and James Church have each presented conference papers in recent months in which they were the principal or sole authors.

Dr. Conrad Cunningham and his wife Diana were part of the 16-member delegation from the School of Engineering to attend the launch of the Space Shuttle Atlantis on 7 February as guests of Kennedy Space Center Director (and EAB member) Bill Parsons. The group also had a behind-the-scenes tour of KSC facilities on 8 February.

Cunningham is serving on the program committees for the Software Engineering for Distributed Systems track at the 3rd International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2009) in Fukuoka, Japan, and for the 2008 Principles and Practice of Programming in Java (PPPJ) conference in Modena, Italy. Cunningham also refereed two chapters for an upcoming book edited by Yupo Chan and John Talburt of the University of Arkansas at Little Rock and Terry Talley of Acxiom Corporation, refereed several papers for the CCSC Mid-South (CCSC:MS) conference, and reviewed a research proposal for the Louisiana Board of Regents.

The conference committee for the 6th annual Consortium of Computing Sciences in Colleges (CCSC) Mid-South conference presented Cunningham with its second award for Extraordinary Leadership, Vision, Initiative, and Service (ELVIS) on 4 April at Arkansas Tech University. He has been active in the conference organization since the first conference in Memphis in 2003, including being conference chair in 2005, and regional board chair since 2005. The first ELVIS award was presented to conference founder Will Mitchell in 2005.

Dr. Pamela Lawhead was an ABET/CAC evaluator this year. She served on a team that visited an institution in the south central region.

Lawhead also served as an NSF CCLI reviewer in March and for NSF S-STEM scholarship program in January.

Lawhead has received word last week that her NSF CCLI proposal, "Alice and the Virtual Portal" has been recommended for funding. She also had her COE-ERDC/US Army Research Center proposal "An Investigation of Terrain Reasoning for Causality Collection Points" funded on 14 February 2008. Both of these projects are now underway.

Dr. Dawn Wilkins is President of the MidSouth Computational Biology and Bioinformatics Society (McBIOS) in 2007-8. The conference will be held in Starkville in 2009, where Mississippi State faculty member Dr. Susan Bridges, computer science faculty member at MSU, will lead the local arrangements team.

Dr. Philip Rhodes is serving on program committee for the International Symposium of Information Visualization in Biomedical Informatics (IVBi) 2008, to be held in London in July.

Dr. Yixin Chen is serving on several program committees: IADIS European Conference on Data Mining (DM 2008), ACM International Conference on Image and Video Retrieval (CIVR 2008), International Conference on Computer and Information Science (ICIS 2008), 9th International Conference on Visual Information Systems (VISUAL 2007), 8th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD 2007), and Recherche d'Information Assistée par Ordinateur (RIAO 2007). Chen was also a reviewer for the Dutch Science Research Council (NOW).

On March 7, instructor Charles Jenkins attended the regional high school science fair in Greenville, Mississippi, as a special judge to select and present the Ole Miss Engineering award. This is a part of the School's efforts to recruit students to enroll in engineering or computer science at Ole Miss.

Dr. Stephen Rice served as a judge in the 2008 Region VII Science Fair on campus on 26 March.