20 Year MU Service Award Recipients

Oanh Pham Receives 20 Year MU Service Award

Employee longevity and commitment are becoming alarmingly uncommon in the current economy. Fortunately, that is not true of the MSCS Department. Oanh Pham, our cherished administrative assistant, received the MU 20 Years of Service Award for her service to Marquette and the Department of Mathematics, Statistics, and Computer Science. Oanh was originally hired as Technical Typist for the department in March, 1989. At that time MSCS occupied the 3rd floor of the Wehr Physics Building. She has served four chairpersons, providing a continuum of efficiency to manage the often hectic demands of students and faculty. Congratulations Oanh!

Gregory Cissell
B.S. in Mathematics ’01

My name is Gregory Cissell and I am writing to let you know I enjoyed reading your latest newsletter. I also would like to welcome a new member of the Cissell family. My wife, Rebecca (Wenzel) Cissell (B.S. in Education ’01) and I had our third child on Feb 9, 2009. Henry Thomas joins two excited older sisters, Hannah (4) and Ellie (1).

I am serving in the Navy and teach Navy ROTC at Northwestern University until May—when I transfer to Newport, Rhode Island for 6 months of training. After that, my family and I are moving to Norfolk, VA where I will serve as the First Lieutenant aboard the Amphibious Landing Ship USS Gunston Hall.

Thanks again for the great newsletter and I look forward to the next edition.

Margaret Rubinshteyn
B.S. in Computer Science ’01

I graduated from Marquette in 2001 with a computer science degree. I also did some graduate work in Bioinformatics and worked with Dr. George Corliss on a project to scan in documents from several administrative offices at the university. At that time I was planning to go on to medical school. I graduated from medical school in 2006, and have gone on to do a pediatric residency. I have two months left of my training. Although I like medicine, I have missed many aspects of computer science. Over the years, I have often thought about combining the two fields and using my medical knowledge to help with the design and implementation of computerized records. I am now looking for work in that field.

Math Major:
Good Preparation for Law School?

Three of our May 2008 graduates, James M. Burrows, Laura Ann Hawkins, and Matthew Westphal, all math majors, are enrolled in the Marquette University Law School. All three made the Dean’s List in Fall 2008 and again in Spring 2009. Congratulations!

We would like to know where you are and what you are doing.
Please send news and address updates to:
newslet@mscs.mu.edu
In this issue of the MSCS Department newsletter, you’ll find summaries of the breadth of recent MSCS student and faculty research in bioinformatics, computer science, mathematics education, mathematics, and statistics; that is, summaries of our department’s ongoing, cutting-edge research in the computational sciences. This lively intellectual environment has led to exciting changes taking place in our academic programs. In Dr. Clough’s column you can read about the successful day long Computational Sciences Symposium in April, and the undergraduates who are working with faculty members on various research projects this summer! In addition, the department will host a three day summer workshop on Computational Thinking for the Sciences. The workshop, designed for local area high school teachers, will explore ways to enrich current classroom content with computation.

On this canvas of activity, there is also an administrative change: on July 1, I’ll assume the duties of MSCS Department Chair and Dr. Anne V. Clough, having completed her term as interim chair, begins a well-deserved sabbatical year. Dr. Clough will be spending the sabbatical year focusing on the development of a three camera SPECT (single photon emission computed tomography) imaging system for small laboratory animals as well as refining mathematical models which will be employed in the interpretation of experimental data. The research and development effort will be partially funded by the very competitive Way Klingler Sabbatical Fellowship award she received this spring. On behalf of the MSCS Department faculty, staff and its students, I congratulate Dr. Clough for winning the sabbatical award, as well as thank her for her tireless efforts in leading the department. As Dr. Clough mentioned in her past column, the MSCS Department is an exciting, and dynamic community of students and faculty who enrich learning and research; and I look forward to serving the department in my new role as its Chair. A reminder to you, our alumni: We love to find out where you are and what you are doing! Please take a moment to send us an update.

By Dr. Gary Krenz

MSCS Embraces Growth
Cutting-Edge Research in Computational Sciences

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The Fall of 2009 marks the start of the graduate program in Computational Sciences in the Department. This program offers M.S. and Ph.D. study in Mathematics and M.S. in Computer Science. The nature of the program makes it one of very few offering graduate study in these areas in the U.S. There will be graduate research in applied mathematics, statistics, applied computer science, bioinformatics, computational chemistry, computational physics, and engineering through this program – and other areas as it grows.

This program requires all students to complete a core of six courses: Probability, Simulation, Applied Mathematical Analysis, Applied Linear Algebra, Elements of Software Development, and Parallel & Distributed Systems. Due to the uniqueness of the program, text and other materials are not readily identifiable for these courses. Small groups are busy creating the syllabi for these courses, to be offered for the first time in 2009-2010.

The first class of students is nearly complete, with 12 Ph.D. students starting in the Fall along with 7 M.S. students. The initial class comes from Ghana, Tanzania, Turkey, Bangladesh, India, China, and the U.S. There were over 50 qualified applicants for the Assistantships available in the Fall. We were pleased with the response to this new program, especially given the short time to advertize it. In the 2010-2011 year, we expect another similar number of doctoral students to join the program.

Beginning in the year 2009, the Helen Way Klingler College of Arts and Sciences was presented to Dr. Dennis Brylow on February 2009. The 2009 Excellence in Faculty Advising Award of the Helen Way Klingler College of Arts and Sciences was presented to Dr. Dennis Brylow on April 17, 2009.

Congratulations, Dennis!
2009 Honors Convocation

Two MSCS undergraduate majors were honored on April 16 at the 2009 College of Arts and Sciences Honors Convocation. Mollie Gengler, a senior mathematics major from Wauwatosa, Wisconsin, received the Outstanding Mathematics Undergraduate Award. Mollie is a member of Pi Mu Epsilon, the mathematics honor society. She plans to pursue graduate work in statistics at the University of Wisconsin-Milwaukee.

Joshua Jocham, a senior mathematics and secondary education major from Greenfield, Wisconsin received the Miriam Connellan Award. The Connellan Award is given to the teaching major in mathematics who has demonstrated the greatest potential for success in the field of mathematics education. Joshua is a member of Pi Mu Epsilon, Phi Beta Kappa, and Pi Lambda Theta (the education honor society). He plans to teach mathematics in Milwaukee at the secondary level.

MSCS faculty and students attended the 40th ACM Technical Symposium on Computer Science Education, in Chattanooga, March 2009. From left: Mike Schultz, Zachary Lund, Dr. Craig Struble, Dr. Dennis Brylow, Tim Blattner, Aaron Gember, Adam Koehler, and Adam Mallen. Members of the group attended the three days of technical sessions, presented at the NSF CCLI Showcase, represented Marquette at the Upsilon Pi Epsilon Computing Honor Society annual convention and Abacus Awards, and competed in the ACM Student Research Competition.

Mr. Tim Blattner represented Marquette in competition with over 20 other undergraduate and graduate students from universities around the country at the SIGCSE round of the ACM Student Research Competition in Chattanooga, TN. He is pictured with his work on integration of graphical processor power into the Condor high-throughput computing environment.

Mr. Aaron Gember (right) explains his work on real-time transmission control protocol (TCP) for embedded devices at the SIGCSE round of the Association for Computing Machinery (ACM) Student Research Competition (SRC) in Chattanooga, TN. Aaron placed in the top three finalists, and goes on now to the ACM SRC grand finals; his research paper will compete with undergraduate finalists from all 12 rounds of the ACM SRC conferences worldwide.

Upsilon Pi Epsilon

Fourteen Computer Science and Computer Engineering students joined in re-forming the Marquette chapter of Upsilon Pi Epsilon. UPE is the international honor society for computing and information disciplines, endorsed by both the IEEE Computer Society and the ACM. UPE chapters across the country and around the world work to recognize outstanding scholarship, promote the advancement of computing, and support members in their continued education. Pictured, from left to right: Mike Schultz, Oscar Goh, Brian Arnold, Adam Mallen, Joshua Peterson, Aaron Gember, Ben Sturm, Gabe Van Eyck, Matt Netkow, Tim Blattner, Matt Strong, Greg Jacobs, and Ian Obermiller. Not pictured: Fran Huntado. Congratulations!

Dr. Michael Slattery was the featured speaker at the Pi Mu Epsilon Initiation banquet held on April 28, 2009. Initiated to the mathematics honorary society were: Adam Feller, Mohammad-Ali Jazayeri, John Johannes, Bria Meyer, Edward Speck Kern, James Daniel Stemper.

Pi Mu Epsilon

Joshua Jocham, the recipient of the 2009 Miriam Connellan Mathematics Education Award.

Mollie Gengler, the recipient of the 2009 Outstanding Mathematics Undergraduate Award.

May 2009

B.S. in Computer Science
Aaron Gember
Matthew Netkow
David Hartman
Ian Obermiller
Daniel Koza
Timothy Repka
Andrew Lossman
Andrew St. Jean
Adam Mallen
Benjamin Sturm

B.S. in Applied Mathematical Economics
Dane Hager

B.S. in Mathematics
Mollie Gengler
Katherine Szczesniak

B.A. in Mathematics for Elementary Teachers
Micaela Williams

B.S. in Teaching Mathematics
Joshua Jocham
Sarah Kuchta
Andrew Simmons

M.S. in Computing
Victor Martinez
Prajakta Sonar
Joseph Schell
Justin Swanson

M.S. in MSCS (Computer Science)
Sergey Belyankin
Nicholas McGinness
Karl Stamm

M.S. in MSCS (Mathematics)
Joseph Hamelund
Peng He
Siyan Xu