2010

Bulldog Bytes

University of Minnesota-Duluth **Department of Computer Science**

A Message From the Department Head

Rich Maclin

Hello to all. This is my sixth *Message From the Department Head*, though likely my last for a while as there will be a new department head next year.

The big news in the department this past year was that we received our full six year accreditation from ABET, the national accrediting body for computer science. As part of the process we made some changes to our program, adding Software Engineering as a required course for majors as of last year. We believe that this will make our program even stronger going forward. We would like to again thank the members of our industrial advisory board and our alumni for providing us feedback on our surveys and at our board meetings. This feedback helps us keep our program up to date and relevant to the field.

In departmental news we again saw small increases in enrollment for both our Computer Science and Computer Information Systems degrees, a trend we hope will continue. Our networking and hardware lab (located in MWAH 187), which has its own networking equipment and removable hard drives to allow students to get hands-on experience with networking, operating systems and hardware, has been a big hit with students. We are also adding another large computational server this year to allow students to do research on large scale problems.

The UMD campus continues to change, adding new buildings such as the new Civil Engineering building and the new AMSoil arena downtown. Computer Science is still located in Heller Hall on the third floor, though there are rumors we have to move temporarily when the building is updated. We will keep you informed.

Please stop by and visit us if you are in the area of UMD.

Alumni Spotlight

Kristy Vanhornweder

Despite the struggling economy of the last few years, computer science and related disciplines remain good choices for undergraduates looking to land a rewarding job after completing a four-year degree. According to the latest UMD Career Services alumni survey, 100% of responding CIS graduates are employed, while 94% of responding CS graduates are employed, with several of the unemployed pursuing graduate education.

While a graduate degree is not necessary to find a good job, every once in a while a UMD undergraduate comes along who wants to take education to the next level. Kristy VanHornweder, who received her UMD computer science bachelor's degree in 2000, is one of those. She actually double-majored in CS and mathematics, and went on to receive her CS master's degree in 2002 and mathematics master's in 2004, both at UMD. Currently she is working on a Ph.D. in CS at the University of Tennessee-Knoxville where her research is in visualization tools for teaching graph algorithms. Her choice of research area is not surprising given her passion for teaching.

Becoming a teacher was not on Kristy's radar when she arrived

Staff Spotlight

Jim Luttinen

Some UMD computer science faculty have been around long enough to remember a time around 1985, just after the department split off from mathematics, when a computer science undergraduate student was hired to manage the department's computer equipment, which consisted of a DEC PDP-11 mini-computer connected to dumb terminals in faculty offices. Not long after, the department acquired a Sun file server with Sun workstations in a few faculty offices. By the end of the 1980s, as the department grew, machine management was handed off to the campus-wide department then called Information Systems, later to become Information Technology Systems and Services (ITSS), which handled academic computing.

Among its many services, ITSS manages student computing labs that the department depends upon to this day, but in the 1990s a need was recognized for student computing facilities tailored specifically for computer science students, including high-performance workstations and mobile platforms to support lab activities for upper-division courses in operating systems, networks, and software engineering. With funds provided by a technology fee

ALUMNI SPOTLIGHT CONTINUED FROM PAGE 1

at UMD in the fall of 1996. She had grown up in a rural area of northwestern Wisconsin where her family owns land including woods and a pond. She played baseball and softball, participated in science fairs, and learned about astronomy. Like many kids of her generation Kristy enjoyed computer games but she also took to programming. "In junior high and high school I had a couple programming classes which I thought were a lot of fun," she remembers. "My dad is a high school math teacher so that probably also factored in." When it came time to choose a college, UMD was an easy choice. "I wanted to stay in the area and close to home, and my brother got his degree from there." Her UMD professors remember her as painfully shy when she enrolled, although she was clearly talented and on her way to earning the CS department's Academic Achievement Award and the math department's Outstanding Senior Award.

But being comfortable in front of a lot of people was not something that came natural to Kristy. "In 5th grade I won a speech contest in my class and advanced to a regional competition," she recalls, "which was ironic and surprising to everyone being that I was one of the least expected to do so well at a public speaking engagement." Later, she would write in an online retrospective of her UMD teaching experience that "It was always very difficult for me to be comfortable in front of the class. When I had to give presentations or speeches in high school, I dreaded it very much." Kristy's transformation from dreading public speaking to becoming passionate about teaching began with her experience as a teaching assistant for the CS department as she began work on her master's degree.

Kristy stayed at UMD for her graduate work because "I wasn't ready to leave the area yet, and most likely I would've had to leave to find a job." She also felt that "something really good" was going to happen if she stayed and went to graduate school. What happened was that Kristy blossomed as a teacher when given her own labs and sections to manage as a teaching assistant. "I realized that academia is my niche and I basically discovered a talent I didn't know I had." Still, it wasn't easy. "It was a struggle at first since I was very afraid of public speaking and presenting to the class, but it got a lot better in just 2 years and continued to do so after that."

Kristy was so determined to become a good classroom teacher that she recorded herself during her discussion sections, listened to herself, and asked her professors to also listen and provide input. She also implemented every programming project herself (a rarity for teaching assistants, who usually don't have the time), because she knew that the experience of struggling with the same issues the students would face would make her a better teacher. Her perserverence paid off, and she was given the department's Graduate Teaching Assistant Award in 2002.

Still not ready to leave the area, Kristy enrolled in the UMD mathematics department's master's program, where she not only performed as a teaching assistant but was also given her own courses to teach alone. She finished that degree in 2004 and taught mathematics for a semester at St. Scholastica, but soon

STAFF SPOTLIGHT CONTINUED FROM PAGE 1

for computer science courses, and under the guidance of then department head Donald Crouch, the department began to set aside space and purchase equipment for its own student computing labs. By the end of the 1990s we once again had a need for an internal systems administrator. This time, however, hiring students would clearly not suffice. A professional was needed, and the department was lucky to eventually find and hire Jim Luttinen, who continues as our systems administrator of the "modern" age.

Jim was born in Beloit, Wisconsin, and to hear him talk he was a devout fan of the Packers, Brewers, and Badgers even before his family moved to Wausau when he was two years old. At Wausau East High School, in keeping with his passion for sports, he wrestled and played baseball. But there was also no question as to his academic bent. "I was a math and science person," he says. "I took as many of those classes as were offered. I took some non-technical classes to try and stay half-way well-rounded." He graduated from high school in 1983 and decided to attend the University of Minnesota-Twin Cities, planning to major in either computer science or electrical engineering. It didn't take long to decide. "After taking a couple of physics classes," he laughs, "I realized I'd better stick with computer science." He also got his first A in college in an upper-level computer science class, confirming his choice.

In his second year Jim learned of a systems administration job in the UMTC computer science department's Systems Lab. "When I went in for the interview, they just started showing me what I'd be doing, and I was trained in as the system administrator for a Data General MV/10000." Jim is thus old enough to remember when the so-called mini-computer, neither a mainframe nor a desktop machine, dominated the technical landscape. "The operating system for the Data General was called AOS/VS. Most of us used Zenith z29 terminals connected to a Vax 11/780 running some version of BSD." By the late 1980s, however, the demise of the mini-computer was on the horizon. "We had other systems in the department that were running Unix, as well as some brand new Sun workstations with bitmapped displays," Jim recalls.

Student Spotlight

Nontraditional Students

2011 will be the first year (in this writer's fallible memory) to feature two 40-something Department of Computer Science seniors. Although they are only casual acquaintances, **Ross Eaton** (Computer Information Systems) and **George Harnish** (Computer Science) both grew up in Duluth using computers only their professors remember, graduated from area high schools, and first enrolled at UMD twenty or more years ago. While their academic paths are somewhat different, both are proof that it's never too late to finish what you've started. In the interests of seniority we'll start with George first.

George Harnish

George was born in Iowa in 1964, though "I can't say Iowa and I made much of an impression on each other," he quips. By the time he was almost five, his family settled in Duluth, where his mother was a librarian and his father a radio and television broadcaster, and naturally his interests in reading and technology were always encouraged. "In junior high I'd take the bus downtown after school to Radio Shack to program their TRS-80, then ride home with my mom."

Like some of his professors, George is old enough to recall using an acoustic phone coupled modem and teletype machine at Duluth East High School, where "I discovered the Usenet, email and other temptations while the computer teacher's back was turned." Although he graduated from East in 1982, he had no immediate plans for the future. Growing up in the Reagan era before the Soviet breakup, "I was not alone among my peers believing nuclear war was inevitable," he muses, but he loved the arts, especially singing and drawing.

After high school George enrolled at UMD when "computers were something people just rolled their eyes at the mention of," he recalls. He laughs when he things about what it took to register for classes back then. "It took about four hours of standing in line, until you got to the window. Then you'd discover your classes were full, as well as your second choices, and have to step out of line to look up your next options, track down teachers for signatures and so on." No one imagined how computers would change that.

Despite his early exposure to the TRS-80, George did not take computer science courses when he first started at UMD. Still, he dabbled with the emerging technology, getting his hands on an Apple II and learning a little Fortran and assembly language. Then, unwittingly witnessing computer history, he watched the introduction of the first Apple Macintosh in 1984. "I borrowed $2000 to buy one. It had 128K of memory and ran the OS on a 400K floppy. My roommate or other friends were using it whenever I wasn't, so I doubt it was ever turned off the first two years I owned it."

Like some students of every generation, George took courses in college that interested him, but he didn't have a graduation plan. "So I decided to leave before being kicked out. I moved to the Twin Cities and took some odd jobs until I got into graphic arts." He has always been interested in art, and indeed will graduate with an art minor. But back in the 1980s everything was done with film cameras and dark rooms. George watched as the field changed quickly with the advent of desktop publishing. "Within a very few years, using the camera was a rarity, and by the time I left, a very expensive camera had been gathering dust in a dark room we used only for making coffee and hiding from the sales staff."

Although he did well in graphic arts while in the Twin Cities, George was obliged to return to Duluth to take care of his father during his last few years. Like other fields in Duluth at the time, graphic arts was saturated and he struggled to find relevant work. So in 2006, twenty years after leaving school, he re-enrolled at UMD to take computer science. "I had always worked or played with computers on some level. I thought it might be interesting to see how academic computer science differed from what I'd been teaching myself."

George is philosophical about the challenges involved in going back to school after an extended absence. "There are plenty of assumptions made about us older students, and we make them about ourselves as much as anybody," he admits. From a cognitive perspective, "I would say that factual memorizing is definitely more difficult now than when I was in my early twenties," but he's amazed at how he incorporates that knowledge into his daily work. Socially and culturally, he sees advantages and wisdom with age. "Unlike younger students, I have a context of life experience, including expertise, to fit my education into. I have a social perspective: friends and family outside of school, and a sense of how I fit into the community. I have fewer distractions and a sense of purpose and responsibility I lacked in my twenties."

Although George has been encouraged to go to graduate school, "especially somewhere exotic where my friends and family can visit," he intends to hold off on that for a while to solidify his new skills. "I'm excited to try out my new coding chops and see what I can build." Given his artistic bent, he would like to find work that incorporates his creative side, but he knows that he may not afford to be choosy when it comes to job offers. Still, the wisdom and foresight that come with age is evident as he envisions possibly creating and populating such a work environment himself some day. "Perhaps in ten years I'll be able to tap the flow of brilliant young students and keep them employed here in Duluth."

Ross Eaton

Ross's experience was different than George's in that he did not experience a long hiatus from school. Between 1990 and now he has been enrolled in courses nearly continuously, but during that time events have conspired to delay his graduation just a bit. Like the tortoise in the parable, Ross has doggedly stayed in the race over the years and hopefully will be crossing the finish line in 2011.

Ross was born in Duluth in 1971 and has remained here since. He had eclectic interests growing up, including bicycling, reading, construction, science fiction, and "just about anything to do with electronics," he recalls. Then a friend introduced him to a Timex Sinclair (a machine even this writer does not remember). "It was the epitome of cool," says Ross. "From that point on, I begged my parents to buy me a computer," but it wasn't to be, since at that time his family "was living from paycheck to paycheck."

When Ross was twelve he got a paper route and saved up enough money to buy his first computer, a Commodore 64. At the time he couldn't afford a floppy drive, so he had to learn how to write his own BASIC programs. Not long after, at thirteen, he put up his first Bulletin Board System (BBS, a phone modem-based precursor to modern web pages and social networks). "It wasn't the most popular BBS in the area, but I did get a few calls per day," Ross remembers. "My favorite part was when people wanted to chat with the SysOp. When I heard the phone ring, I would run and check my computer to see if someone needed me for anything."

Ross graduated from Duluth Central High School in 1990 and enrolled at UMD the same year. His mother wanted him to be a doctor, and his father wanted him to be an electrician, but he wanted to program computers. Initially things went well; he still had his paper route (now delivering 400 newspapers!) so he had some money, and he had time to study, so he did well in his first computer science courses. Then he discovered he had a new role, as a father. "After my daughter was born, I soon realized that I wasn't going to be able to make it financially with just my paper routes."

His grades suffered drastically, so he dropped out of school. He tried several times to re-start but became discouraged at the amount of ground he needed to make up. Between 1999 and 2005 he tried various other directions, including getting a Nursing Assistant Certificate, allowing him to work at a health center for four years. He also got a class A driver's license and worked for a local trucking company, seeing a lot of the country, "but I was away from home far too much," he recounts. He even worked for a time with a propane company, before getting a job at the UMD Food Court in 2004. Still, except for a few years after 2001, he managed to stay enrolled at UMD and take classes when he could.

In 2005 he started taking classes again in earnest thanks to the Regents Scholarship. "I was able to work one class at a time into my work schedule. Though I was doing fairly well, I felt that I needed to pick up the pace a bit," he reflects. By then he was working full-time for UMD Facilities Management. He increased his load to take two, and sometimes three, classes at a time while working daily form 3:00 to 11:30. Now, twenty years after starting at UMD, he is two courses away from a bachelor's degree in Computer Information Systems.

Ross feels there are advantages and disadvantages to being an older student. "I have lived life," he asserts. "I know a lot of what is expected of me. I feel more comfortable talking with professors and my peers than I did when I was 18." As for the disadvantages, he recalls that "when I was a `traditional' student, students would sigh every time the vocal `non-traditional' students asked questions." He feels that younger students don't understand that "when you get older, the way you learn new concepts changes." And programming concepts have changed a lot since Ross first tinkered with computers. "The movement toward object-oriented programming was a tough one for me to get a handle on."

Ever the Duluthian, Ross would like to get a job in information technology at UMD. Given his persistence, we wouldn't bet against it.

"Very nice."

Jim got valuable work experience during his undergraduate career. Not only did he manage the Data General machine, he also managed mail and usenet news, worked at the help desk, and did some networking and wiring. During his last semester he applied for a number of permanent full-time positions outside of academia, but he had his eye on a systems administrator job at UW-Madison in their computer science department. Two interviews later he got the job, and after graduating with his B.S. in computer science from UMTC in spring 1988, he started with UW-Madison that summer.

Jim was the main help desk person for the computer science department, which at the time had 40 faculty, about 200 graduate students, and a large number of undergraduates. As with his experience at UMTC, Jim saw technology change quickly. "We started out with Vaxes and Sun workstations, but later on we switched over to PCs running some Unix variant. Towards the end of my

time there, we started to use Linux."

Jim remembers a project he worked on setting up the computers and software for a new scoreboard at the UW Fieldhouse. Given his interest in sports, this seemed perfect, and he volunteered his time in exchange for passes to the newly constructed UW golf course. It also seemed ideal for the fan in him. "That first year, I think I had to work at every football, men's and women's basketball game, volleyball game, and wrestling match. If something was going on at the Fieldhouse, I was probably there in the crow's nest." While it was interesting for him, it made him realize he didn't want to work at sporting events. "I get too much enjoyment out of watching games, and having to work at the games took that enjoyment away."

While at UW-Madison Jim made friends with a number of graduate students, one of whom, Rich Maclin, went on to take a faculty job at UMD. In 1999, Rich informed Jim of the systems administrator opening here, which was a 10-month appointment with summers off. This appealed to Jim, who spends a lot of time in the summer at family cabins in Wisconsin. Jim says he was "lucky enough to get the job," but the department is lucky to have him. Between the desktops in our labs and graduate student and faculty offices, and the laptops in Heller 306, Jim administers about 100 computers, managing to keep a lot of users happy in the process.

When Jim first started with us, we were mostly using Sun workstations running Solaris. "Now we've pretty much become a Linux shop," he says. "I think this is good for our students, as most of them have Windows experience coming in. This broadens their horizons, and exposes them to software development with Linux." He still deals with some Apple and Windows machines, but Linux is his preference. "I know a lot more about Windows now than I ever wanted to know."

Away from work, Jim, a bachelor, still likes sports. "I'm a spectator at heart, so I go to UMD hockey and basketball games. I go to the NCAA Frozen Four when I can---I've been to twelve or thirteen, I think." A diehard Packer fan, he tries to get to at least one game every year. He's also been around the country for a number of World Series games. Besides being an avid fan, he also still competes, but "I've had to switch to sports that are easier on the body," he admits. (This writer remembers a noon basketball game ten years ago when Jim ruptured his achilles tendon.) He plays a lot of golf in the summer, and shoots in the 80s if he keeps his drives in the fairway. He also plays on a curling team in the winter along with colleague Hudson Turner. While these are fairly docile sports, he still goes out and plays hockey from time to time. "It's in my blood, I guess." Along with, happily for us, an affinity for managing the technical affairs of computer science departments.

after realized that she wanted to return to computer science. She became convinced that in order to teach what she wanted at the college level she would need to leave the area and pursue a Ph.D.

She settled on UT-Knoxville because it offered the best financial aid package, did interesting research, had not-too-rigorous degree requirements, had good TA opportunities, and didn't pressure her to be a research assistant. Knoxville also has a relatively low cost of living and is located not too far from the Great Smoky Mountains, an area Kristy has grown to love.

As a graduate student at UMD Kristy had done some work with strategic game-playing programs, so it seemed natural that her dissertation topic might have to do with artificial intelligence. She began work on a proposal at the junction of AI and biologically inspired computation, but she soon realized that it did not fit with her desire to teach computer science at a teaching college or small university. So she switched her topic to visualization and simulation tools for teaching graph algorithms, which is a better fit for her.

Still, the challenges of a Ph.D. are formidable no matter what the topic is. She admits that making a dissertation creative and novel is challenging for her. "It's hard knowing if you've read enough literature to know the state of the art or if there's something you've overlooked," she states. "There's the fear of getting `scooped' and someone else publishing a paper on the very thing you're working on." Not to mention the qualifying exam, which is "challenging with 3 courses of material to study for a 3 hour exam -- you never know what they might put on there." Kristy has survived the qualifying exam and is hoping to finish her degree in 2012.

Kristy believes UMD helped prepare her for her Ph.D. program by giving her opportunities to teach and making her a strong programmer. "I took full advantage of the fact that there were CS discussion sections where I could prepare and present lectures. In the math department, I had the opportunity to teach and be fully responsible for my own classes." In addition, "I had a lot of courses with a strong programming element and as a result have become a competent programmer," she says with some understated humility.

Despite the research requirements of getting a Ph.D., teaching remains Kristy's passion. She has TA'd for a wide variety of courses over the years, and even volunteered to take extra unpaid TA duties just for the experience. For each course she TA's, she maintains detailed web pages that offer hints and guidance for assignments. And it has all paid off again with another TA award from UT-Knoxville.

As if teaching and working on a dissertation were not enough, Kristy occasionally volunteers her time and expertise to work on various web development projects for alternative health websites. This has contributed to her shift in research interest to more visual and GUI (graphical user interface) related areas over the last few years. It has also expanded the array of courses she'd eventually like to teach.

Graduate Program News

Ten graduate students received their M.S. degrees in May 2010:

Sathavahana Bhogapathi	**Michael Neilsen**
Ramakrishna Cherukuri	**Dipesh Pandey**
Anand Janjal	**Sridhar Uppala**
Vivek Kasireddy	**Sandeep Vadlamudi**
Abhijeet Mahule	**Sunil Vejandla**

Our *Outstanding Graduate Teaching Assistant Award*s went to **Michael Neilsen** and **Sandeep Vadlamudi**. Here they are along with images from our annual spring luncheon for 2nd-year graduate students and our fall graduate student picnic:

Faculty Publications

Colburn, T. and **Shute**, G., Knowledge, Truth, and Values in Computer Science, in J. Vallverdu (Ed.), *Thinking Machines and the Philosophy of Computer Science: Concepts and Principles*, pp. 119-131, IGI Global Publishing, 2010.

Colburn, T. and **Shute**, G., Abstraction, Law, and Freedom in Computer Science, *Metaphilosophy 41:3* (2010), pp. 345-364.

Crouch, C., **Crouch**, D., Bhirud, D., Poluri, P., Polumetla, C. and Sudhaker, V., A Methodology for Producing Improved Focused Elements, in Geva, S., Kamps, J. and Trotman, A., (Eds.), *Focused Retrieval and Evaluation (INEX 2009)*, LNCS, vol. 6203, pp. 70-80. Springer.

Maclin, R., Kunapuli, Bennett, K.P., Shabbeer, A. and Shavlik, J., Online Knowledge-Based Support Vector Machines, *Proceedings of the European Conference on Machine Learning (ECML 2010)*, Barcelona, Spain.

Maclin, R., Natarajan, S., Kunauli, G., Page, D., O'Reilly, C., Walker, T. and Shavlik, J., Learning from Human Teachers: Issues and Challenges in Bootstrap Learning, AAMAS 2010 Workshop on Agents Learning Interactively from Human Teachers, Toronto, Canada.

Pedersen, T., The Effect of Different Context Representations on Word Sense Discrimination in Biomedical Texts, *Proceedings of the 1st ACM International Health Informatics Symposium*, November 11-12, 2010, pp. 56-65, Arlington, VA.

Pedersen, T., Pakhomov, McInnes, Adam, Liu and Melton, Semantic Similarity and Relatedness between Clinical Terms: An Experimental Study, *Proceedings of the Annual Symposium of the American Medical Informatics Association*, November 13-17, 2010, Washington, DC.

Pedersen, T. and Burstein, Towards Improving Synonym Options in a Text Modification Application, University of Minnesota Supercomputing Institute Research Report UMSI 2010/165, November 2010.

Pedersen, T., Computational Approaches to Measuring the Similarity of Short Contexts: A Review of Applications and Methods, University of Minnesota Supercomputing Institute Research Report UMSI 2010/118, October 2010.

Pedersen, T., Duluth-WSI: SenseClusters Applied to the Sense Induction Task of SemEval-2, *Proceedings of the SemEval 2010 Workshop: the 5th International Workshop on Semantic Evaluations*, July 15-16, 2010, pp. 363-366, Uppsala, Sweden.

Pedersen, T., Information Content Measures of Semantic Similarity Perform Better Without Sense-Tagged Text, *Proceedings of the 11th Annual Conference of the North American Chapter of the Association for Computational Linguistics* (NAACL-HLT 2010), June 1-6, 2010, pp. 329-332, Los Angeles, CA.

Prince, C., Gogate, L. and Matatyaho, D., Two-Month-Old Infants' Sensitivity to Changes in Arbitrary Syllable-Object Pairings: The Role of Temporal Synchrony, *Journal of Experimental Psychology: Human Perception and Performance*. Volume 35,

Issue 2, Apr 2009, pp. 508-519.

Prince, C. and Hollich, G., Comparing Infants' Preference for Correlated Audiovisual Speech with Signal-Level Computational Models, *Developmental Science*, Volume 12, Issue 3, 2009, pp. 379-387.

Willemsen. P., Colton, M., Creem-Regehr, S. and Thompson, W., The Effects of Head-Mounted Display Mechanical Properties and Field-of-View on Distance Judgments in Virtual Environments, *ACM Transactions on Applied Perception*, in press.

Willemsen, P., Potter, K., Gooch, A., Gooch, B., Kniss, J., Riesenfeld, R. and Shirley, P., Resolution Independent NPR-Style 3D Line Textures, *Computer Graphics Forum*, in press.
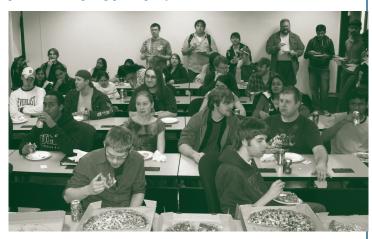
Undergraduate Program News

Twenty-six undergraduate students received their bachelor's degrees in CS or CIS in May 2010:

Caldwell Bailey	**Matthew Knoll**
Matthew Beaumont	**Matthew Maass**
Michael Fawcett	**Jacob Marty**
Sonja Foss	**Adam Mika**
Matthew Fraser	**Jamee Olson**
Drew Geyen	**John Pouchak**
Erik Haferman	**Andrew Randall**
Matthew Holst	**Jonathan Raymer**
Laura Humphreys	**Thomas Sackett**
Michael Jacobson	**Drew Von Spreecken**
Dustin Jerome	**Nicholas Wera**
Benjamen Johnson	**Matthew Wong**
Matthew Kiesow	**Syed Raza Zaidi**

Departmental awards were given to **Sonja Foss** and **Michael Jacobson**. Here is Sonja with her award at the spring pizza party:

Of course, the newsletter would not be complete without a group photo of the spring pizza party:

Alumni News

Jeff Sharkey, UMD Computer Science graduate (2006) and currently with Google, met with current Computer Science and Computer Information Systems students in November to discuss working at Google, Android, cloud computing, and the power of open source software. Students were captivated by Jeff's animated presentation:

Alumni News - Continued

Siddharth Patwardhan, who received his MS in CS in 2003 and went on to complete his Ph.D. at the University of Utah, has been working as a post-doc on the Watson project at IBM Watson Research Lab.

Watson, an artificial intelligence computer system capable of answering questions posed in natural language, received notoriety recently when it competed on the quiz show Jeopardy! and beat the show's two best performing human contestants.

Sid develops algorithms for various components within Watson's DeepQA (question answering) system, including temporal reasoning, question decomposition, lexical constraint recognition and answer type recognition.

Campus News

UMD held grand opening ceremonies June 28 for the $15 million Swenson Civil Engineering building located on the North East corner of the campus just off St Marie Street.

The state-of-the-art teaching/training center will house the new Bachelor of Science degree program in Civil Engineering which admitted its first freshman students in the fall of 2008--and will graduate its first class in the spring of 2012. The state-of-the-art structure is the 12th new building and/or major addition constructed on the UMD campus since 2000.

The Duluth-Superior area is hard to beat for scenic beauty, and that combined with Kristy's family's home in the woods made it difficult to leave. But the southeast USA has its own attractions, and Kristy has made the most of them. "I take several trips to the mountains of North Carolina and Tennessee and the Great Smoky Mountains and Blue Ridge Parkway every year," she says. The fact that these are the most visited national parks in the country does not deter her. "I love to go on scenic drives with overlooks, go hiking, visit waterfalls, see mountain views, see fall foliage, take pictures, and drive through and around some of the quaint mountain towns." She has been so taken with the area that she imagines a permanent future there. "I'd love to settle in the mountains of western North Carolina. My dream home would be a rustic log cabin-like place with a deck that has mountain views and maybe a cascading stream or waterfall nearby." Here she is during one of her forays, complete with mountains, her trademark flannel shirt, and Great Smoky Mountains T-shirt.

Besides her professional goal of teaching computer science in college, Kristy also envisions putting her energy behind other causes that matter to her -- "Maybe volunteering to do trail or overlook maintenance for the Great Smoky Mountains or Blue Ridge Parkway or computer or website work for them." Beyond beautifying the landscape, Kristy can also imagine getting involved in environmental causes such as ending mountaintop removal coal mining, reducing air pollution, or encouraging recycling. It sounds like wherever Kristy's career and interests lead her, computer science students and the environment are likely to benefit.

More Campus News

Chancellor **Kathryn Martin** retired in July after leading UMD for 15 years. **Dr. Lendley (Lynn) Black** took over as chancellor in August. Black comes to UMD from Kennesaw State University in Kennesaw, Georgia, where he served as Provost and Vice President for Academic Affairs.

In December, UMD's football team won the NCAA Division II championsip for the second time in three years.