2009

Bulldog Bytes

University of Minnesota-Duluth

Department of Computer Science

A Message From the Department Head

Rich Maclin

Hello to all. Well, it has been an eventful year (I am sure for most of you as well). The university, faced with a significant budget shortfall, cut 8% from the UMD budget, which led to some belt tightening. In the Computer Science Department we were able to preserve all of the faculty and instructor jobs but had to give up two teaching assistant positions. We believe that we will be able to cope with this loss and still provide a quality education.

Our big event over the past year was being visited once again by a review team from ABET, the national accrediting body for computer science, to evaluate our program. The reviewers were especially impressed with the student contingent who met with them and our program alumni, commenting that they thought the current and former students were excellent. Overall, the team noted that the program was strong and they specifically commented that we do not seem to have compromised the material taught in our upper division courses to make it easier. We are very grateful to everyone who has contributed to our accreditation process, including our students, alumni, industrial advisory board, and our faculty. We will have more information about how things turn out with the process (it will not be finalized until next summer) in next year's newsletter.

In departmental news we continue to see small increases in enrollment for both our Computer Science and Computer Information Systems degrees. Our students seem to be doing especially well at finding jobs in this tough environment, but if you find yourself in need of candidates please consider our students. We assemble a set of electronic resumes for our graduating seniors for interested employers, which can be obtained by contacting Tim Colburn (tcolburn@d.umn.edu).

Please stay in touch with us and stop by and visit if you are in town.

Faculty Spotlight

Gary Shute

Examining the interests and experiences of computer science professor Gary Shute, it becomes clear not only why the department can call upon him to teach an impressive diversity of courses, but how he came to have such eclectic intellectual interests. In the 25 years he and his wife, ITSS director Linda Deneen, have been at UMD, Gary has taught courses that run the entire spectrum of computer science -- machine organization, computer architecture, data structures, operating systems, networks, software engineering, object-oriented design, computer ethics -- you name it, Gary has probably taught it. At the same time, Gary's quest for knowledge has led him from such pragmatic disciplines as electronics to theoretical ones like mathematics and physics, a journey that has been supplemented with intense interest in psychology. Today he is probably best seen, along with his colleague Tim Colburn, as a philosopher in computer scientist clothing, but more about that later.

Some people grow up frequently moving from one place to another because they are, to put it crudely, "military brats." The best way to describe Gary's childhood is as an "academic brat."

Born in Massachusetts while his father was studying agricultural engineering, Gary and his family moved to Maine, then to Georgia, then to New York, then back to Georgia, and finally to Illinois -- all by the time he was 8 years old! As if that wasn't unsettling enough, during his first 4 years in Illinois Gary went to three different schools. Not surprisingly, as Gary remembers it, "I was a bit of an introvert, and since I didn't develop much socially, I started developing my intellectual interests." In 6th grade he started reading his father's physics books and his desire

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Alumni Spotlight

Joe Sauve

It's not often that someone born and raised in Duluth can receive a degree in Computer Information Systems from UMD and find a rewarding career in their hometown, but that's exactly what Joe Sauve did. After graduating with his CIS degree in 2008, Joe dropped in to the offices of Versimark Inc. in downtown Duluth just to say hello to a friend. "I was standing in the lobby, speaking with another employee about how I had finished college and how I was really interested in web development," Joe recalls.

He thought it was purely casual conversation, but "to my fortune, one of the owners was within earshot and overheard the conversation. When I had left, he tasked his project manager with giving me an interview! I didn't even have to apply!"

Joe did have to go through a technical interview process, "to prove that I know what I say I know," he laughs. Although he had no C# or .NET experience he was able to solve a problem given to him and then "I dressed it up using my CSS know-how to make it sexy." That got him a third interview with the company's software developers. "After that I got nervous because I didn't hear back for a couple of weeks. So, I made a bold move and wrote an email offering two weeks of my time for free so that they could evaluate me before hiring me. They contacted me shortly thereafter and told me that I had the job."

Joe went in for what he thought was salary negotiation but was told that unfortunately the company's forecasts had just declined and was he still willing to work two weeks for free? "I said absolutely, and began working without pay the next Monday. That two weeks was fun, tenuous, and uncertain. I went into it with very low expectations so that I wouldn't be let down," he says. But in the end it paid off for Joe, who started on a contractual basis with the firm but is now a full-time employee on salary. "I couldn't be more thrilled. The work environment is very organized and relaxed, and the work itself is very stimulating and rewarding. Though I had no .NET experience, my education in the principles of software design, development, and engineering adequately equipped me for this work." As a full-time web application developer, Joe now helps develop, manage, and maintain proprietary web content management systems for two major U.S. insurance companies. "It's beautiful to work locally, and yet to do work that has a national impact," he says.

Joe is a third-generation Duluth native who was always interested in tinkering, first with toys then with household electronics. He

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Student Spotlight

Timur Kudaibergenov

While UMD's Computer Science Department's graduate program is routinely dominated by international students, the undergraduate program is traditionally populated by students from northeastern Minnesota, northwestern Wisconsin, and the Twin Cities. While lately we often welcome undergrads from Asian countries, never (at least in this writer's 22 years at UMD) have we hosted a student from Kazakhstan, with a punishing left jab to boot.

His name is Timur Kudaibergenov, an international exchange student from the city of Semey, situated in the eastern part of Kazakhstan. While Timur believes his hometown is relatively small, at 330,000 people, he must have been shocked to wind up in the much smaller Duluth, with its very different culture, traditions, and economy.

Timur was born in 1987, and says he has mixed feelings about growing up in his hometown. "I have many friends and family who filled my childhood with joy and love," he says. "But on the other hand I always wanted to go somewhere else, to learn and to do something great with my life." Growing up in his hometown consisted of playing soccer, hanging out with friends, going to computer clubs and playing computer games, dancing at disco clubs, and listening to techno music. He was also interested in sports, particularly boxing, which we'll return to later.

Timur's parents are both engineers. He was actually born in Russia and moved to Kazakhstan when he was 8 years old, living there until he was 17. Then came an opportunity in 2004 to come to this country through a leadership program sponsored by the U. S. government called FLEX, or Future Leaders Exchange. He enrolled as a foreign exchange student at Harbor City High School in Duluth. "When I first came to the U.S. my English was very poor," he admits. "I only knew a few simple phrases and couldn't keep up a very good conversation." Timur caught on quickly though, and now holds his own with the language.

After graduating from high school, Timur was awarded a full scholarship from the government of Kazakhstan to attend college in the U. S. He chose UMD and decided to become a software engineer. His parents' being engineers had a lot to do with his decision. "I wanted to follow my folks' footsteps," he says. "When it came to the point where I had to decide what kind of engineer I wanted to be, I weighed several options and decided to pick something that would be challenging, something that would be a hot topic in the future. I also liked the idea of creating and designing things in the virtual (digital) world."

Timur has enjoyed studying at UMD. "I have had many good

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FACULTY SPOTLIGHT CONTINUED FROM PAGE 1

for knowledge was cultivated.

The moving didn't stop, however, and when he was 13 his family moved to Missouri, where his father worked on a Ph.D. "During my first year there my social thermometer read absolute zero," Gary remembers, "so I developed another interest, in electronics," reading electronics magazines whenever he could. His first contact with computer science came from reading these magazines. He remembers reading one article on the construction of a simple transistorized computer. "It raised many questions in my mind because it mostly just dealt with representing information in binary. I wanted to know, how do you do calculations and more complex operations?" The next year, changing schools yet again, Gary was invited to a school social function, allowing him to meet students before classes started. "Finally, my social life had commenced," Gary muses. During his last two years in high school he took his first philosophy course, launching an interest that would eventually develop into his current research in the philosophy of computer science.

Gary's academic path is circuitous. When he started college in 1964 he had developed a somewhat anti-science attitude (this was the 60's after all) so he tried architectural engineering. However, "it didn't take me long to figure out that I didn't have much talent in that area," he says. In 1965 his father began teaching at South Dakota State University so Gary went along, and, "having gotten over my anti-science thing," he took a mathematics major but also took as many courses as he could in physics. While working on his major he was required to take some courses in programming. This answered some of his earlier questions about computer science, but raised some more. "I had to go through an operating system to get a program to run. How does the operating system work?" he wondered. "How does a compiler create machine language from Fortran code?" At the same time, for a required liberal education course he took psychology, leading him to develop an interest in the works of Piaget, which to this day influence Gary's thinking about learning in computer science.

While in college Gary found himself thinking about many things, but "unfortunately, I wasn't thinking about meeting graduation requirements," he says, "so after 4 1/2 years, I still didn't have a degree." To compound matters, it was the Vietnam era and he received a draft notice. Like many young men in those days, rather than go into the Army or Marines he decided to enlist in the Navy where he worked as an electronics technician. His training didn't teach him more than he already knew, but his work did give him an understanding of how device failures impact the behavior of electronics circuitry. He also had some contact with computers, if you can call a card reader/printer with 2 KB of memory programmed by plugging jumper wires into a large board full of small sockets a computer. Although he was good at what he did, in the Navy he ended up with a lot of time on his hands. "It was mostly a very boring experience," he remembers. "I got a good sense of where my lack of discipline was leading me: nowhere."

After 6 years in the Navy, Gary returned to South Dakota State U. with a clearer focus and finished his mathematics degree in one year, taking a number of philosophy courses as well. He went on to Michigan State University to work on a Ph.D. in philosophy, but what he calls his "lack of writing skills" convinced him to get the Ph.D. in mathematics. After his degree he and Linda taught math for a year in Wisconsin but had to battle a rather feeble job market. So both of them committed two years to retraining themselves in computer science and hit the job market again in the mid-1980s. "The difference was amazing," Gary remembers. "We sent out fewer applications but had far more offers." They wound up at UMD because "it left us with a strong sense that they wanted us here." They were hired by the mathematics department, but unknown to them for political reasons the department was undergoing a split between mathematics and computer science factions, and before they moved to Duluth they were asked to vote on the split. "Although we were unaware of the details, we felt the autonomy for computer science was important, so we voted for the split." As a result, Gary's computer science career coincides with the entire history of the UMD computer science department.

After arriving, Gary and Linda both chose computational geometry as a research area due to their mathematics backgrounds. As Linda moved more towards administration, Gary got more interested in data structures, since they played such an important role in computational geometry. But he was "struck by the gap between descriptions of them and what it takes to make them work in real programs," and so he became more interested in their software engineering aspects. His interest in specialized research waned as he thought about how different parts of CS were related and how to bring out those relationships in his teaching. This naturally moved him toward the philosophy of computer science, a topic that his colleague Tim Colburn was also pursuing, and it soon became apparent that their combined ideas resulted in a productive synergy. Starting with a treatment of the philosophical aspects of abstraction in computer science, together they have published and presented ideas on metaphor in computer science, the concept of law in computer science, and the role of values in computer science. Highlights of this collaboration include four trips to the European conference on Computing and Philosophy.

Gary has spent a lifetime thinking long and hard on a wide variety of topics, and while he finds the various sciences interesting in their own right, "I have found even more fascinating trying to understand how the human mind produces those sciences, an ability that is often not fully appreciated." He does not share the modern view of cognitive science that the mind is just an extremely complex computer, and thinks that thesis is backward; the mind creates computers, not the other way around, and therein lies its mystery. "If we want to understand what is happening in computer science, mathematics, science, or engineering, we need to understand the humans that are doing it," he declares. Then the academic brat, er, sojourner, in him comes through as he vows, "I know I will never fully understand it, but I will pursue a deeper understanding as long as I can."

ALUMNI SPOTLIGHT CONTINUED FROM PAGE 2

recalls his family's first computer, a Packard Bell 486SX with 4 MB of RAM running Windows 3.11. "I took this computer apart many times," Joe says. He became accustomed to working with the DOS command line, and learned to connect to various bulletin-board systems by modem. Although he retained his interest in computers as the Internet age bloomed, after graduating from Duluth Central High School he was not immediately interested in seriously pursuing more schooling, so he worked in a retail carpet store for about three years. That experience, he says, "made me realize that I needed to go back to school if I intended to have a comfortable income and do the things that I wanted to in life." So, he completed an AA degree at Lake Superior College in preparation for enrolling at UMD. "I chose UMD because I had no plans to move, but also because the Computer Science department had a good reputation according to friends and trusted individuals. I'm very happy with the education I received. The department showed genuine interest in my learning and success. I will always recommend aspiring computer science majors to UMD."

The department is happy to hear that Joe's education prepared him well for his career. "The most valuable knowledge that I gained during my time at UMD was the education in object-oriented programming (OOP)," he declares. "Java was the medium through which OOP was instructed, and although I do not ever use Java in my daily work, I've found that all of the principles are portable to the technologies that I now use in my career. Polymorphism, reflection, interfaces, design patterns; these are all concepts and principles that I use every day." When Joe started with Versimark he was not a big fan of Microsoft, but he's now a .NET and C# convert. "I have fallen in love with the platform and its satellite technologies, particularly LINQ (Language Integrated Query). It makes working with relational databases a breeze, compared to writing prepared statements and making manual SQL queries."

Joe was introduced to the model-view-controller (MVC) software architecture at UMD and finds it relevant to much of what he does. "In my position, I perform all three levels of development: data modeling, presentation, and middleware. It's interesting to see how the entire development process can be analogized to the MVC design pattern," he declares. When asked about his company's software process model, he says they often take a "silo" approach, in which a single developer is in charge of all three aspects of development. "This is not to say that there is no peer review," Joe says, "but we develop rapidly, and this methodology suits us well. It's kind of a cross-breed of waterfall-meets-agile development."

Although Joe has been in the industry less than two years, he knows well the stress that can be brought on by clients' requirements. "Scope-creep, poor specifications, and feature-bloat are all very real challenges to developers and project managers," he says. "Fortunately, I have very talented managers and a great team to work with." To compensate for the stress of deadlines, the company offers flexible hours and allows working from home, along with an espresso machine, ping-pong table, and big-screen movies shown while code is moved to production servers.

Despite the frantic pace of his work at Versimark, Joe somehow finds time to moonlight on pet projects. "I'm entrepreneurial at heart, so I really hope that one of my personal projects leads to a higher tax bracket," Joe laughs. One project is an online property management system for landlords to manage their properties, tenants, and leases. Another is a multi-platform system for hunters that predicts deer movements on the basis of astronomical information. When complete, this system will be wrapped into an ASP.NET web service, but Joe is also looking toward iPhone and Google Android applications for it. Pursuing this project has led Joe to some interesting contacts, including the developer of the iPhone Pocket Universe application, who revealed to Joe that his iPhone app was so popular he left his job at Microsoft. "Amazing and funny!" recalls Joe. "Talented Microsoft developer and project manager leaves Redmond for iPhone app!"

Modestly seeing himself as a novice with much to learn, Joe says he's not sure what the future of software engineering holds, but he guesses that mobile platform penetration will only increase and that web frameworks like ASP.NET MVC will dominate. He's also excited about iPhone development, "but first I need to get a Mac!" he says. When asked where he'd like to be in 5-10 years, Joe hopes to still be working for Versimark, and that the company will have many more corporate clients. He also hopes to continue developing his personal projects. While Joe might have been fortunate to find a challenging job in Duluth, it looks like Duluth is fortunate to have Joe.

STUDENT SPOTLIGHT CONTINUED FROM PAGE 2

professors who helped me throughout the years, and I have learned a lot in the CS department." The department has also enjoyed having Timur, who comes across as unusually outgoing, good-natured, and confident. The latter quality may have something to do with his boxing avocation, which he has kept up during his 5 years in the U. S. One can be surprised to learn that this polite and physically unimposing young man is rather ferocious in the ring.

"I started boxing when I was 15. I wanted to be able to protect myself and my friends and family, but I always appreciated boxing as a sport, not as a way to hurt someone. I got really into it, training hard, sparring all the time. I've had a lot of matches. I got 3rd place in a championship when I was 17, I won several awards in regional competitions, and I have three 1st places in my hometown."

Timur still competes. He's had five fights in the U.S., winning four by technical knockout. Last December he had a match in Wisconsin. "I knocked my opponent down in the third round. After the fight he fainted and had a seizure. They had to call the ambulance and take him to the hospital." Luckily for any future opponents, Timur is planning to quit boxing after graduating. "I would like to make my living with my head, not with my fists," he insists. "Boxing has given me a lot. Confidence is probably one of the biggest benefits. Also, boxing made me stay in good physical shape which I believe is very important."

When asked how he has adjusted to the change in culture, Timur does not hesitate. “I definitely have adjusted to the change. I’ve spent all of my mature years in America, and I can say that I have become Americanized over these 5 years.” Still, he would like to return to his home country once he’s gained more knowledge and experience. “My career goal is to become a project manager and maybe start my own business, but right now I want to get an entry position as a software engineer, gain solid experience, and start climbing up the career ladder.” Something tells us that’s exactly what he’ll do.

Undergraduate Program News

The department conferred 28 undergraduate degrees during the 2008-2009 academic year. Students receiving degrees in Computer Science or Computer Information Systems:

Michael Baynton
Miles Blount
Craig Bristow
Michael Brust
Aaron Burstein
Joshua Clark
Benjamin Gilsrud
Ryan Grothem
Scot Halverson
Artena Hiebert
Michael Jacobson
Jesse Johnston
Justin Keppers
David Kluver
Brian Knoll
Michael Kramer
Timur Kudaibergenov
Jerod Lass
Anthony Miller
Michele Olsen
Jordan Parrott
Joshual Prodahl
Daniel Schobert
Stefan Sjoberg
Peter Timinski
Eric Urban
Andrew Waidler
Matthew Wronski

In May, 2009, we held our annual pizza party and awards program.

Outstanding Academic Achievement: **David Kluver**

Outstanding Senior: **Jerod Lass**

Outstanding Service: **Joshua Clark**

Here are Josh, Jared, and David with their awards:

Over the years, the department has enjoyed a productive relationship with, first, West Publishing, then Thomson West, and now Thomson Reuters at their Eagan location. Many of our students have undertaken internships with Thomson, and several former UMD students, including **Jason Hill** and **Mike Krause,** have gone on to established careers. In spring semesters 2008 and 2009, Jason and Mike, along with Ron Titus, another Thomson employee, visited our course CS 4531 Software Engineering to meet with students and give presentations on what it is like to work in software engineering in general and at Thomson Reuters in particular.

Thomson was generous enough to provide pizza and open up career discussions to anyone.

Mike Krause discusses career opportunities with students.

From left to right: Siddharth Deokar, Ron Titus (Thomson) Pavan Poluri, Matt Kiesow, Jason Hill (Thomson) Artena Heibert (new Thomson hire) Mike Jacobson, Mike Krause (Thomson), Andrew Waidler, Atul Kulkarni

Graduate Program News

Nine graduate students received their M.S. degrees in May 2009:

Dinesh Birud	**Andrew Larson**
Siddharth Deokar	**Chaitanya Polumetla**
Varada Kolhatkar	**Pavan Poluri**
Atul Kulkarni	**Varun Sudhakar**
Prasad Kulkarni	

Our *Outstanding Graduate Teaching Assistant Award*s went to **Andrew Larson** and **Varun Sudhakar**.

In spring 2009 we held our graduate student luncheon at Pizza Luce:

And in what has become a fall tradition we had a graduate student picnic at Rich Maclin's house, where we found that this year the first-year class is dominated by women:

Perhaps that's why the food was so good!

Faculty News

Ted Pedersen

Dr. Pedersen and Dr. Serguei Pakhomov (College of Pharmacy, University of Minnesota - Twin Cities) conducted a nation-wide search and hired two post-doctoral researchers in 2009 as a part of assembling their team to pursue their NIH funded research project: "Semantic Relatedness for Active Medication Safety and Outcomes Surveillance", which is funded though 2012. The first of these hires was Dr. Ying Liu a 2007 Computer Science Ph.D. from the University of Alabama at Birmingham, who also holds an MS from UAB and a BS from Wuhan University in China. Soon thereafter they also hired Dr. **Bridget McInnes**, a 2009 Computer Science Ph.D. from the University of Minnesota-Twin Cities. Bridget is a former UMD Computer Science student who received her BS in 2002 and her MS in 2004.

One of the project's significant achievements in 2009 was the release of an open source software package known as UMLS::Similarity which measures the semantic similarity between pairs of medical concepts. This will be at the core of their system for identifying potentially dangerous interactions among drugs, which is one of the main goals of this project. This software continues to be developed and enhanced, and is available for download from http://search.cpan.org/dist/UMLS-Similarity/. They have also been carrying out human subject studies to determine how physicians and other medical professionals rate the similarity between medical concepts, so that these expert judgments can be compared with the values they arrive at automatically via the UMLS::Similarity software.

Publications:

- UMLS-Interface and UMLS-Similarity: Open Source Software for Measuring Paths and Semantic Similarity (McInnes, Pedersen, and Pakhomov) - Appears in the *Proceedings of the Annual Symposium of the American Medical Informatics Association*, Nov 14-18, 2009, San Francisco, CA

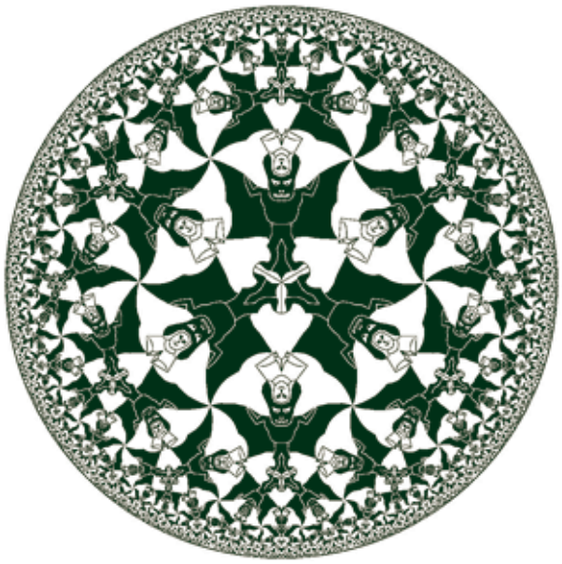
- WordNet::SenseRelate::AllWords - A Broad Coverage Word Sense Tagger that Maximimizes Semantic Relatedness (Pedersen and Kolhatkar) - Appears in the *Proceedings of the North American Chapter of the Association for Computational Linguistics - Human Language Technologies* 2009 Conference, June 1-3, 2009, pp. 17-20, Boulder, CO.

- Improved Unsupervised Name Discrimination with Very Wide Bigrams and Automatic Cluster Stopping (Pedersen) - Appears in the *Proceedings of the Tenth International Conference on Intelligent Text Processing and Computational Linguistics*, March 1-7, 2009, pp. 294-305, Mexico City.

Doug Dunham

Doug continues to exhibit his artwork based on hyperbolic geometry. He had two pieces exhibited at the 2009 Bridges Exhibition of Mathematical Art in Alberta, Canada, and four pieces at MathFest 2009 in Portland, Oregon.

Here is Doug's "Fully Symmetric Angels and Devils":



And here is "Angels and Devils with *3333 Symmetry":

As Doug points out, "This pattern adheres to the idea behind Escher's `angels and devils' patterns that in some heavenly regions the angels should be dominant, and in other hellish regions the devils should be dominant, and in between, `earthly' regions angels and devils should hold equal sway."

Other Publications and Presentations

Allert, J. (2009) *Programming with Visual C++: Concepts and Projects*. Boston, Course Technology/Cengage Learning. ISBN 978-1-4239-0186-0. 739p.

Allert, J. (2009) *Instructor's Manual to Accompany Programming with Visual C++: Concepts and Projects*. Boston, Course Technology/Cengage Learning. ISBN 978-1-4239-0186-0. 200p.

Colburn, T. and Shute, G. (2008) Metaphor in Computer Science, *Journal of Applied Logic 6:4*, 526-533.

Colburn, T. and Shute, G. (2009) Law, Freedom, and Constraint in Computer Science, paper presented at the 7th European conference on Computing and Philosophy, Barcelona, Spain.

Crouch, C. and Crouch, D. (2009) Finding Good Elements for Focused Retrieval, in S. Geva, J. Kamps, and A. Trotman (Eds.): *INEX 2008, LNCS 5631*, pp. 33-38, Springer-Verlag Berlin Heidelberg.

Maclin, R. (2009) ILP for Bootstrapped Learning: A Layered Approach to Automating the ILP Setup Problem, poster presentation at the 19th Intl. Conf. on Inductive Programing, Leuven, Belgium.

Maclin, R. (2009) Transfer Learning via Advice Taking, appears in *Recent Advances in Machine Learning, Dedicated to the Memory of Ryszard S Michalski*, published in the Springer Studies in Computational Intelligence, 2009

Extra-Curricular Pursuits

Multiple Triathloning

Doug achieved some notoriety of another kind when he participated in a local "multiple" triathlon, or short triathlon that is done several times. This one included a 1/3 mile swim, 14 mile bike ride, and a little over 3 mile run. Doug completed it three times, and as the oldest competitor in the event was interviewed for local television. Here he is being interviewed between legs:

Here Doug is seen streaking into the water during one of the transitions:

Kicking the Kek

Tim Colburn and his pal Larry Oakes were sitting around a fire last winter sipping Lagavulin when they decided it was time they hiked the Kekekabic Trail in the Boundary Waters Canoe Area Wilderness before they got too much older. So just before the start of school in fall 2009 they followed through, completing the rugged 40-mile trek in 5 days and 4 nights.

As it happens, Larry is an editor and writer for the Minneapolis Star Tribune, so in January a nice spread appeared in the Outdoors section of the Sunday paper with this photo front and center:

It was one of five photos taken by Tim and Larry that appeared with the article, which pretty well describes the difficulty of following the trail through blowdowns and burns. Still, it was a beautiful hike and a memorable (and dehydrating) experience. Tim has gathered the photos and videos he made here:

http://www.d.umn.edu/~tcolburn/kek/

along with a link to the Star Tribune article as well as a list of GPS waypoints he recorded if anyone is interested.

Getting Married

As if department head Rich Maclin didn't have enough on his plate preparing for the accreditation visit in the fall, he and Tara Richter decided to get married May 23 in Duluth. Then, not one, not two, but three wedding receptions ensued in various locations around the country. Anticipating the obvious question, Rich provided the following in his wedding website FAQ:

"**Q:** Why three receptions?

A: We want to make it as easy as possible for our families and friends which come from across the country to attend, and given the cost of travel right now we thought this would make it easier. Plus, we like parties (and cake). And this way, Tara gets to wear the dress three times."

Well, this writer can confirm that the Duluth reception was a gas, with endless courses of excellent food.

Best wishes for the future, Rich and Tara.

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