



# ALUMNI NEWSLETTER

## MATHEMATICS AND COMPUTER SCIENCE UNIVERSITY OF MISSOURI-ST. LOUIS

APRIL, 2007

<http://www.cs.umsl.edu>

### LETTER FROM THE CHAIR

Dear Alumni and Friends,

Please enjoy reading the Alumni Newsletter. As you may have noticed, in the last few years, the newsletter has expanded into a new format. John Antognoli, Galina Piatnitskaia, Emily Ross and Nazire Koc have been making all the changes and have been increasing our efforts to stay in touch with alumni. The department had a relatively quiet year. Qingtang Jiang was promoted to Full Professor. Professor Jiang is an expert on wavelets and their applications, with more than 30 publications by now. Assistant Professor Adrian Clinger has newly joined our department as a geometer and string theorist. He got his PhD from Columbia University and comes here after visiting the Institute for Advanced Study and Stanford University for a few years. Martin Pelikan has published an edited volume on scalable optimization. Shahla Peterman received the Lecturer of the Year Award from the College of Arts and Sciences. Our PhD program is small but thriving and it is a pleasure to be able to congratulate Eric Mason and David Stamps, the latest two graduates.



*A. Prabhakar Rao*

Cordially,  
*A. Prabhakar Rao*

### RICHARD STALLMAN TO DELIVER THE 2007 SPENCER LECTURE

**"THE FREE SOFTWARE MOVEMENT AND  
THE GNU/LINUX OPERATING SYSTEM"**  
MONDAY, APRIL 23, 2007 7:00 P.M.  
CENTURY ROOM,  
MILLENNIUM STUDENT CENTER

This lecture is made possible by the generous gift of Robert Spencer (B.A. Mathematics, '72).

Richard Stallman is a well-known software freedom activist and software developer. In 1983 he began the GNU Project to create a free Unix style operating system. He has since, been the project's main architect and leader. As a result of this he began the free software



*Richard Stallman*

movement and in 1985 founded the Free Software Foundation. He also co-founded the League for Programming Freedom. The GNU operating system when combined with the Linux kernel makes a complete operating system, which most people simply refer to as Linux (without recognising GNU).

He has received considerable recognition for his work including a MacArthur Fellowship in 1990. He received the Association of Computing Machinery's Grace Hopper Award "For pioneering work in the development of the extensible editor EMACS (Editing Macros)" in 1991, the Electronic Frontier Foundation's Pioneer Award (1998), the Yuri Rubinsky Memorial Award (1999) and the Takeda Techno-Entrepreneurship Award for Social/Economic Well-Being (2001). He has received honorary doctorates from Sweden's Royal Institute of Technology, University of Glasgow, Vrije Universiteit Brussel, Universidad Nacional de Salta, an honorary Professorship from Universidad Nacional de Ingenieria del Peru and membership in the United States National Academy of Engineering.

Dr. Stallman will speak on "The Free Software Movement and the GNU/Linux Operating System" on Monday, April 23 at 7:00 pm in the Century Room of the Millennium Student Center at UM-St. Louis.

### SCHOLARSHIP NEWS FROM RON DOTZEL, CHAIR OF THE ANDALAFTE, SPENCER, AND SCHOLARSHIP COMMITTEES

**Mathematical Sciences Alumni Scholarships** are given each Spring semester to undergraduate students in Mathematics or Computer Science who have an outstanding academic record at UM-St. Louis. These awards are made possible by the generosity of alumni of UM-St. Louis, most of whom are graduates of the Department of Mathematics and Computer Science. The 2006 winners are:

Cathleen Aubuchon	Elizabeth Radetic
Larry Burkett	Clariencia Stroud
John Hoven	Eric Tyhurst
Eric Lee	

The **Joseph and Mary Vogl Scholarship** is given each year to a mathematics undergraduate who has achieved distinction. This year's winner is **Harry Pope**.



The **Raymond and Thelma Balbes Scholarship** is given each year to an undergraduate mathematics major who has attained an outstanding academic record. This year's winner is **Colleen Leahy**.

The **Edward Z. Andalafte Memorial Scholarship** is given each year to a mathematics undergraduate who has a record of outstanding academic performance. This year's winner is **Aleksey Kazakevich**.

The **Andalafte Mathematical Competition** is a 3 hour exam consisting of five very challenging problems. We anticipate offering this competition each year. The competition is open to all UM-St. Louis undergraduates. The winner for 2006 is **David Peaslee**.

Well-deserved congratulations to all.

### REPORT ON THE 2006 SPENCER LECTURE WRITTEN BY SCOTT LAVELOCK

(It was his assignment in English 3140, News Writing)

Robert Hogg, professor emeritus of statistics at the University of Iowa, engaged an audience at the University of Missouri-St. Louis on the role of statistics in everyday life on Monday, April 24.

His speech, entitled "Probability and Life", not only showed the crowd of about 110 students and faculty how they can learn from statistics to make decisions in their lives, but also kept everyone laughing throughout the evening with his sense of humor.

"If you don't know what you're talkin about," joked Hogg, 81, "throw in a decimal point somewhere!"

Hogg (pronounced HOAG) talked of figures, probabilities, and statistics with all sorts of decimal points in his speech given in the Century Room on the 3rd floor of the Millennium Student Center at UMSL. Many of these facts were regarding the probability of winning games of chance, and what people should know before they make any bet.

"By the way, I'm not encouraging to gamble..." Hogg said with a laugh as he provided his audience with numbers that would be helpful to anyone placing a bet on anything from the flip of a coin to the roulette wheel. In fact, his demonstration of statistical formulas, all done on a simple overhead transparency that he jokingly called his Power Point slides, showed how the numbers are stacked against someone rolling the proverbial dice.

The former president of the American Statistical Association showed how someone who enters a casino with \$80 and makes up their mind to finish with either \$100 or \$0 will end up with \$0 a whopping 91% of the time. He also exemplified how remote the possibility of winning the Power ball jackpot is, saying that a person would have roughly the same chance of correctly picking a point on a string being stretched from New York to Los Angeles within one inch of the exact point.

"Therefore, I've never bought a Power ball ticket!" exclaimed Hogg in his transference of wisdom. "But it is still only a dollar!"

The author of four statistics textbooks that are now standard in colleges across the nation had plenty of advice for the crowd mostly of math and computer science students and faculty. His statistical findings have shown that one should not put insurance on anything worth less than two months salary, and that giving money back to charity and education makes the chances very good that your money will go to good use.

"They told me to tell you this, but remember the UMSL Department of Math and Computer Science when you're 81 years old." said Hogg, whose lecture was sponsored by the aforementioned department. UMSL alumnus Robert Spencer, a math student of the class of 1972, underwrote the presentation as the 9th Annual Spencer & Spencer Systems Math and Computer Science Lecture.

Hogg, who has been giving lectures at colleges around the country for over 50 years, had plenty of stories to tell that kept the audience on its toes. He told of one story about an encounter he and his friends had with a few intoxicated men several years ago, where he playfully came to the random conclusion that the probability of one of the drunken men sleeping with another man's wife was about 63%.

"Of course, after I got married I found out that the probability of a married man sleeping with anyone's wife was 0%!"

UMSL Chancellor Thomas George opened the program promptly at 7:30 p.m. by welcoming everyone on a lovely spring evening and apologizing for them having to miss the game between the Cardinals and the Pirates. Hogg grew up in Hannibal, MO and is a lifelong Cardinals fan, however, and kept the Redbird Faithful happy with his stories of watching the team play as early as the 1930s.

Following his speech, Hogg was presented with a framed picture of St. Louis by Chancellor George, to which he responded jokingly, "Oh...I was expecting cash..." Following the chorus of laughter, Hogg assured the audience, "You're a great class; you all get A's! I think you've had enough Hogg-wash!"

### SHAHLA PETERMAN, LECTURER OF THE YEAR

We honor **Shahla Peterman** who received an award of the **Lecturer of the Year** from the College of Arts and Sciences in 2006. Mrs. Peterman has always been a wonderful teacher and a very creative person. The last couple of years also demonstrated her great leadership potential. As you may know from our last year's Newsletter, she was in charge of introducing a new technology into teaching College Algebra. Now UMSL has a new facility (MTLC) where students have an opportunity to study mathematics using modern technology.

Students and faculty members of our department have always known that Mrs. Peterman is one of the best teachers. Her award is recognition of her talent at the college level.

Dear Shahla, we congratulate you once again and wish you many more happy and productive years at UMSL!



## NEW SUITS FOR BILL CONNETT

In the Spring of 1968, a fresh young graduate from the University of Chicago applied for a job at the new campus of the University of Missouri System. The chairman at the time, Ed Andalafte, the new and only professor in the Department, Deborah Haimo, and the Chancellor, Glen Driscoll, all assured the callow candidate that although we were young and awkward, and still unformed we were going to become a great research university. Part of the joy of coming to The University of Missouri- St. Louis (UMSL) would be to help shape the directions and new programs the new school would offer. In particular, they wanted to hire a faculty that would allow this school to become a strong research institution, and in particular we would soon offer the Ph.D. in Mathematics.

The candidate was impressed by the energy of the new enterprise, and decided to come to UMSL to build this new institution. The candidate had no idea how complicated this endeavor would be, nor how long it would take. It was an especially sweet moment on November 10, in 2005, for the graying professor that the callow candidate had become to be part of the examination committee that awarded Karen Wurdack the first Ph.D. degree granted by the Department of Mathematics at UMSL. (Thirty seven years later!) Karen did a great job, and our program is now bubbling along. We now have four graduates, and some twelve other candidates in the pipeline. Neither Andalafte, nor Haimo, nor Driscoll were here to see it happen, but I was.

This singular moment for the Department, and for this graying professor in particular, led to some speculation on my part about the nature of the mathematical enterprise, and the way we carry mathematical knowledge from our mathematical parents to our mathematical children. I was inspired to look up my mathematical genealogy, something I had never done before. You might enjoy looking at this on my web page ([www.cs.umsl.edu/~connett/](http://www.cs.umsl.edu/~connett/), and click on the link to my vita). I was so impressed to see that I am the (great)<sup>4</sup>-grandson of Pafnuty Chebyshev that I decided to give two colloquia this Fall on one of my favorite mathematical objects, the Chebyshev polynomials. In the course of this I looked through many of Chebyshev's papers, and discovered that old Pafnuty was a hell of a guy. He also owned some really classy suits (St. Petersburg chic, circa 1860), which he wore when he was demonstrating some of his more practical inventions, such as a device to row a boat more efficiently, or a hand drive for a wheel chair that keeps your hands clean. I sometimes think that they must have had more fun in those days.

The life of this Research Professor (Emeritus), is not as tranquil as I had imagined it would be. I thought that giving up teaching and administration would free up vast amounts of time for research, and to some extent that is true. I have had the time to pursue a number of questions that Alan Schwartz and I had to put aside in our research program, some because they were too difficult at the time, some



Bill Connett

because they took us too far from our areas of expertise. I am happy to report some success on the first kind of questions (A classification of the n-dimensional polynomial hypergroups). However in the second area, I have spent more time than I care to admit, and so far to no avail, on rethinking the MP3 algorithm using the product formula for the prolate spheroidal wave functions that Alan and I published in 1993.

One reason that the amount of time available for research does not seem so vast, is that in 2003 my wife was recruited from the Department of Surgery at Washington University to the Department of Surgery at the University of Michigan, in Ann Arbor. I now spend one to two weeks a month in Ann Arbor, and this commuting takes its toll. On the other hand, maybe old Pafnuty did not have more fun in those days of yore. Hmm. Maybe I need some new suits.

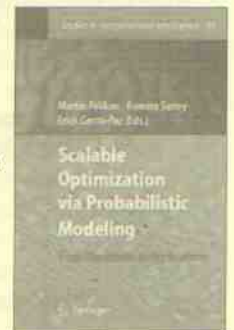
## MARTIN PELIKAN PUBLISHES A NEW BOOK "SCALABLE OPTIMIZATION VIA PROBABILISTIC MODELING: FROM ALGORITHMS TO APPLICATIONS"

Martin Pelikan, Assistant Professor of Computer Science at UMSL and Director of the Missouri Estimation of Distribution Algorithms Laboratory (MEDAL), and two of his former colleagues from the University of Illinois, Kumara Sastry and Erick Cantu-Paz, have published a new edited book. *Scalable Optimization via Probabilistic Modeling* (Springer, 2006) presents a comprehensive picture of a new category of optimization procedures called Estimation of Distribution Algorithms (EDAs) and should be of interest for optimization researchers and practitioners alike.



Martin Pelikan

Well-known author and researcher, David E. Goldberg, Distinguished Professor and Director of the Illinois Genetic Algorithms Laboratory (IlligAL) at University of Illinois says, "Pelikan's newest book focuses like a laser beam on one of the hottest topics in evolutionary computation over the last decade or so: estimation of distribution algorithms (EDAs). EDAs are an important current technique that is leading to breakthroughs in genetic and evolutionary computation and in optimization more generally." Duane D. Johnson, Professor and Bliss Faculty Scholar, University of Illinois at Urbana-Champaign highlights the importance of the book for practitioners: "the book brings together a selection of experts that (1) introduce the current methodology and lexicography of the field with illustrative discussions and highly useful references, (2) exemplify these new techniques that dramatically improve performance in provable hard problems, and (3) provide real-world applications of these techniques."





Martin Pelikan joined the University of Missouri in St. Louis in 2003 and recently started the Missouri Estimation of Distribution Algorithms Laboratory (MEDAL) located in the Department of Mathematics and Computer Science at UMSL. Illinois's Goldberg thinks that the book, the laboratory, and the growing funding are signs of good things to come. "Martin Pelikan's success in attracting research funding, the establishment of his lab, and the publication of his second book signal in bold strokes that UMSL and St. Louis are now at the center of the estimation of distribution universe. These signs bode well for further funding, technology transfer, and first rate scholarship in the years to come."

### ADRIAN CLINGER IS BUILDING A "THEORY OF EVERYTHING" (SOME STRINGS ATTACHED)

Adrian Clinger joined the Department of Mathematics and Computer Science at UMSL in the Fall of 2006. Originally from Romania, Adrian is a graduate of University of Bucharest. He arrived in the United States in 1997 and for the next five years, pursued graduate studies in mathematics at Columbia University in New York City. He received his PhD in May 2002. Prior to his arrival at UMSL, Adrian held post-doctoral positions at the Institute for Advanced Study and Stanford University.



*Adrian Clinger*

Adrian's research interest lies in the field of algebraic geometry, with a special emphasis on the mathematical aspects of string dualities. This study straddles the interdisciplinary juncture between classical mathematics and modern theoretical physics and is distinguished by both its subtle blend of geometry and number theory and its simultaneous contributions to the cutting edge in mathematics and physics. The traditional interaction between mathematics and physics, wherein mathematics provides the language for formulating physical theories and these theories themselves become highly structured examples which serve to motivate mathematical conjectures, has reached a new level over the last two decades with the advent of string theory. Belief in the existence of this theory as a Theory of Everything has led physicists to make conjectures in geometry. The interest of mathematicians in this interplay comes from the fact that the sorts of mathematical statements predicted in this way have turned out to be quite novel, producing conjectures unlike anything that has been seen before. Much of the progress the last fifteen to twenty years in large areas of geometry traces back to this source.

One of the most important results of Adrian's research concern the geometrical aspects of one particular string duality, the F-Theory/heterotic duality. This duality predicts a novel and surprising correspondence relating classical objects in algebraic geometry: K3 surfaces, elliptic curves and holomorphic principal bundles.

### QINGTANG JIANG



*Qingtang Jiang*

Dr. Qingtang (Quinton) Jiang joined UMSL in Fall 2002. He was promoted to Full Professor in 2006. Dr. Jiang earned his Ph.D. in Mathematics from Peking University, China, in 1992. Before he joined UMSL, Dr. Jiang held visiting positions at the National University of Singapore, University of Alberta, and West Virginia University. Dr. Jiang is also a member of the Institute of Computational Harmonic Analysis, led by Curator's Professor Charles K. Chui.

At UMSL, Dr. Jiang taught various courses, including Applied Math I, Computational Curves and Surfaces, Functions of a Complex Variable (both undergraduate and graduate courses), Introduction to Differential Geometry, and Numerical Analysis I.

Dr. Jiang offered Special Readings and Directed Reading to undergraduate and graduate students. Dr. Jiang also advised and is advising Ph.D. students.

Dr. Jiang's research interests include (1) wavelet analysis, and (2) its applications to image compression and signal classification, and (3) computer aided surface design. Dr. Jiang has made contributions in the areas of the study of approximation order and smoothness analysis of Wavelets, construction and applications of Wavelets to image/signal processing. One of his most important results in these areas is about the algorithm for the smoothness analysis of multi-wavelets. Multi-wavelets is a new type of wavelets possessing all the desirable properties such as high approximation order, short support, high smoothness order, and symmetry, which cannot be attained simultaneously by scalar (traditional) orthogonal wavelets. Dr. Jiang developed with his collaborator a simple and stable algorithm to provide the smoothness order of this type of wavelets. This algorithm is used by research groups at other universities.

Dr. Jiang's most recent achievements in research are on the vector subdivisions for surface design. Subdivision is an efficient iterative process to generate surfaces. It is being widely used in computer animation, computer-aided design and other industrial sectors. However, the current approach (scalar-valued schemes) cannot provide a desirable interpolatory subdivision scheme. By using the vector subdivision approach, Dr. Jiang and his collaborator introduced an innovative concept of the interpolatory matrix-valued subdivision scheme. Corresponding to this definition, they have constructed interpolatory matrix-valued schemes with desirable smoothness order and minimum template sizes. In addition, they have constructed interpolatory matrix-valued schemes based on bivariate splines (piecewise polynomials of two variables). Since splines provide close-form and analytical representations of the subdivision surfaces, these schemes are very appealing to CAD/CAM applications.



## LIFE IN ST. LOUIS (BY HENRY KANG)

When I was asked to write about myself, I looked back and realized that it's already been more than three years and a half since I joined UM-St. Louis, so in a way it feels like I'm a bad student trying to do homework way after the deadline (which I normally do not accept as an instructor). Anyway, I appreciate this opportunity and I will try to write something not too boring for the readers.



Henry Kang

Let me begin with my childhood. I was born in South Korea (note: North Korea = bad; South Korea = good), but I grew up as a kid in New York City, as my father had a job there working for some international trading company. Hence, I had to learn English before I got to know my mother language, and I ate McDonald's before I tried Asian junk food. I guess that explains why to this day I still love burgers and fries too much for an Asian guy. Even after my family returned back to Korea, I was often viewed by my friends as some kind of a foreign kid. I was rather dark-skinned for a Korean, and I spoke English better than Korean at the time. In addition, every year I happened to be the tallest, biggest guy in my class (except for one year when we had a local Judo champion in my class), and I preferred burgers and hotdogs over Korean noodles and kimchi. In fact, it was true that in my mind I always had this thought that some day I would get back to US to work for some international company, just as my father did. Now that I see myself working here in UM-St. Louis, I guess that expectation was not too far off.

While my job here is to do teaching and research in the field of computer science, I've always had a passion for two other things in my life: art and sports. As a kid, I loved drawing and sketching so much that I was often scolded by my school teacher as I filled all the walls and tables in the classroom with my fascinating (?) artwork. It is not a coincidence that my major research area is computer graphics. In fact, it strongly influenced my decision to major in computer science in the first place (because I knew it would give me a chance to study computer graphics). As for my other passion, sports, I love all the kinds. Not only do I love watching them, but I also love playing them myself. It's kind of funny that I fell in love with a different kind of sport in each chapter of my life. As I spent my early childhood in US, my first favorite sport was baseball. Being the biggest guy in my class, I was naturally selected as a clean-up hitter, but I preferred batting third, just like Albert Pujols in the St. Louis Cardinals. The reason was simple: you are guaranteed to bat in the first inning (and I hated waiting). Speaking of the Cardinals, I believe it is my fate to be living in St. Louis, since the Cardinals had been my favorite major league baseball team long before I got a job in St. Louis! I was especially drawn by their power offense that once manhandled Chan Ho Park, the first ever Korean major leaguer, with two grand slams in a single inning (which remains a major league record). So imagine how excited I must have been last fall, when the Cardinals won the championship for the first time in the last 24 years. I mean 24 years! And I got to witness it right here in St. Louis, the so-called baseball heaven. Am I

the luckiest guy in the world or what? To properly pay tribute to them for their feat, I brought my whole family to the championship parade in downtown, saluted the players and celebrated with the crowd. As a sports fan, it was one of the happiest moments in my life.

Going back to my original subject, as I got into the middle school, I quickly became enthusiastic about playing soccer, which had one big advantage over baseball: you don't have to wait for your turn to be a hero. You just run to the ball and kick it into the net as many times as you can. It's that simple. In high school, I had to play basketball, not just because I was still the tallest guy around, but because playing basketball was the easiest way to attract girl students (playing soccer was viewed by girls as rather "uncivilized"). Then in my college years, I found it increasingly difficult to gather people to play group sports, so I focused on playing tennis. And just how much was I into it? As I recall, I was always dressed in a tennis outfit and brought my tennis rackets to my classes (which might have offended some professors). And I videotaped all the live matches of tennis greats like Boris Becker, Pete Sampras, Andre Agassi, and so on, for later review. Then when I was admitted to my graduate school, I realized there was no tennis club for graduate students, so I made one myself by gathering 30 or so members, and elected myself as the club president, then I happily served as a long-term dictator. This madness eventually slowed down as I was fortunate enough to meet a beautiful girl named Su, who would become my wife after 6 years of dating. And after I joined UMSL, well, I could hardly find time even for one-on-one sports, so I turned to solo sports such as running or swimming. These kinds of do-it-alone sports, however, are tough to keep doing as you always break a promise to yourself, which explains why I'm getting fat every day (and my wife is getting tired of having to buy new pants for me).

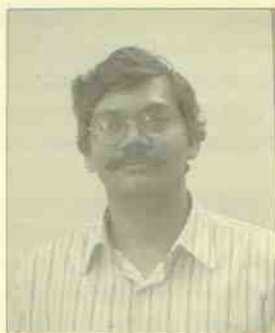
Well, I guess that's about it. I'm not sure if this has been enough of a story to tell about myself, but I'd better stop here and let other people write something more valuable for this newsletter. Let me conclude my story by mentioning that my life in St. Louis, with or without sports, has been the most gratifying and humbling chapter for me, as it has been full of pleasant surprises and new challenges, much more so than my prior student era, and I'm trying to enjoy every minute of it. I love working in UM-St. Louis, and I'm grateful to have an opportunity to fulfill my dream, that is, to explore the world of computer graphics and share the experience with students. Is there anything more joyful than this? Probably not, except there's one thing that comes to my mind: my daughter Jane, born in St. Louis just 21 months ago. She is rather shy and doesn't speak much yet, but her smile, and a dazzling one at that, makes me realize that I'm indeed the luckiest guy in the world, for which I'm eternally grateful to God.

## UDAY CHAKRABORTY EXCELS AT UMSL

Uday K. Chakraborty joined UMSL as an assistant professor of computer science on 01/01/2001 and was promoted to associate professor with tenure with effect from 09/01/2004. Uday received a bachelor's in Electronics Engineering, a master's in Computer Engineering, and a PhD in Computer



Science & Engineering, all from Jadavpur University, Calcutta (now Kolkata), India. Before joining UMSL, he had worked at CMC, a software company, working on projects in Calcutta and London. He was a member of the 10-member team that in 1989-90 designed the software for scheduling the London Underground Railway system (the "tube"). He worked at GMD Forschungszentrum Informationstechnik (German National Research Center for Information Technology) (now Fraunhofer Gesellschaft) as a research scientist for about two years.



*Uday Chakraborty*

Uday was an assistant professor and later an associate professor of computer science at Jadavpur University. His research interests are in theory and applications of evolutionary algorithms and soft computing. He has (co)authored one book and over 70 articles.

Uday thinks he is fortunate to have experienced both academia and industry. He enjoys being among students who he thinks help him stay young. For the past few summers he has been mentoring promising high-school students under the STARS program. Mike Lee, a senior at Philips Exeter Academy, New Hampshire, worked with him in the summer of 2006 on a project that earned him (Mike) an Intel Science Talent Search (2007) Finalist award.

After finishing high-school, Uday wanted to study Sanskrit but was cajoled into engineering by his father and high-school teachers. He still hopes to resume Sanskrit after retirement (maybe sooner).

He lives in Chesterfield, MO, with his wife, Mandira, and daughter, Uttara. Mandira, who has a PhD in computer science, taught as an assistant professor at Jadavpur University, but now stays home to homeschool Uttara who has a dual-enrollment at Parkway Central Middle school.

### **PAUL SCHNEIDER ENJOYS HIS RETIREMENT**

Paul A. Schneider, Senior Lecturer in Mathematics, retired from full-time teaching in May, 2004. Presently, he teaches evenings at UM-St. Louis part-time. He also enjoys his model railroading hobby. He has become involved with Westie Rescue of Missouri, which involves fostering rescues and assisting in transports of soon-to-be adopted West Highland White Terriers.



*Paul Schneider*

Paul was a beloved teacher of generations of UMSL students. He also earned the Excellence in Teaching Award.

### **THE HIDDEN PAGES OF MIKE SCHULTE'S LIFE ARE NOW REVEALED**

I was born in Joliet, IL and moved to Denver, CO early. I spent 20 years there, more than I have anywhere else in my life. I still go back there regularly since my parents and some siblings still live there. The area has grown enormously; when we moved into the house where my parents now live in the early 1960's, there were undeveloped lots less than half a mile away; no longer is that even close to true.



*Mike Schulte*

I went to the University of Colorado for Bachelor and Master degrees in Mathematics, the first at the Denver campus and the latter at the Boulder campus. I joined the US Navy and was stationed in Orlando, FL as a teacher at the Naval Nuclear Power School. The students were very hard working, except for the one who felt it was more important to tell everyone what it is like to be "the youngest Master Mason in Iowa" than to pass the school. While I was there, I started to do "cave diving": scuba diving in underwater caves. The northern part of Florida, especially in the Swanee River basin, is known for its underwater caves. It is a dangerous sport; people have died doing it; it was still very enjoyable. I also helped a friend sail a boat from Clearwater (near Tampa) to Boca Raton (above Miami) around the tip of Florida in 5 days. We had planned to go through Lake Okachobee, but they were doing lock repair, so we had to go the long way around. We endured the idiots who waterskied directly in front of us; if they had fallen, we would have gone right over them and it would not have been a pretty sight.

I went to Florida Institute of Technology in Melbourne, FL for a second Masters in Computer Science. They hired me as an instructor and I found my home in the area of Language Recognition. I taught there for 11 years. While there I met my wife (although not as a student). This area of Florida is lucky in that it doesn't get many hurricanes; the only one that we had, we had just before we left. My wife worked for a state agency that sent her to Miami right after Hurricane Andrew; the pictures you see about it do not do it justice.

I spent a year in Minnesota at St. Cloud State University, a year that the governor did the unheard of and closed state offices twice in the same year because it was too cold: 40 below zero and winds of 30 mph.

Now I am at UMSL. I still enjoy teaching, more than I enjoy the system administration that is the other half of my job currently. My wife and I learned Scottish Country Dancing when we lived in Florida, and I still do it regularly. There is a group that meets in St. Peters twice a month, we have a ball in June, and we do public dancing for a variety of occasions. We dance at the Scottish Games in Forest Park in early October and at the Tartan Days in St. Charles in early April. Note that this is a Scottish form of ballroom dancing (somewhat similar to American square dancing, which derived from it); it is not the Scottish Highland Dancing, derived from hunting and war celebrations, that is probably more familiar to people.



**DABA EARNED HER PHD IN APPLIED MATHEMATICS IN MAY, 2006**

My real name is Rokhaya Niang Ndao but I am known to everybody by Daba which is my Senegalese name. I was born and raised in Senegal some years ago, and I received an associate degree in Applied Mathematics from the former Universite d'Excellence now Universite Gaston Berger de Saint Louis, Senegal.



*Daba Niang*

I have spent almost 8 years at UMSL as a student, a teaching assistant and an instructor, and I can tell without a doubt that they were 8 wonderful years. First of all, I made real and sincere friendships with fellow graduate students that will last a lifetime. I felt very welcomed in the math department, and I had the opportunity to receive a first class education while working on my masters and my Ph.D. I enjoyed all the classes I took with Professors Welland, Connett, Dotzel, Cai, He, Jiang, Stockler and Chui. The masters program prepared me well to tackle the Ph.D. program. I enjoyed all my courses in applied mathematics because they dealt with current research in Image Processing and Wavelets and Spline Theory. Besides, I enjoyed teaching and interacting with my students and it gives me pure joy to see a former student just stopping by my office to say hi.

I hope in the near future to obtain an assistant professorship position and fulfill my passion of being the students' guide into the great and exciting mathematical world.

**NEWS FROM GRADUATES**

**Christine G. Claspille (Skubic)**

BS Computer Science, 1988  
Current employment: Boeing, Systems Engineer, Future Combat Systems

**Mary El-Baz**

BS Computer Science, 1984  
M.S. Management Information Systems, 1992  
Current employment: Currently, I have the extraordinary privilege of working in a business dedicated to improving the lives of individual investors. I'm a Senior Programmer/Analyst at Edward Jones.  
Favorite things about UMSL: Quality education with renown faculty.

**David Cross**

BS Computer Science, 2000  
Current employment: Software Developer at Silicon Laboratories, Inc in Austin Texas.  
Favorite things about UMSL: Flexible class schedules for non-traditional students.

**Joe Epplin**

I am the first BS Computer Science granted by UMSL, August 5, 1983  
Current employment: Lead Domain Architect, Enterprise Architect, Anheuser-Busch Information Technology.  
Favorite things about UMSL: Excellent Professors (Connett, Schwartz, E.Z.Andalafte), priority of solid foundation over trends, accommodation of work schedule needs of students.  
Adventures since graduation: Authorship (shared, of course) of an International Standard for geometric definition of product parts (ISO10303), technical lead in the development of a chemical structure search engine tolerant of conformationally flexible (rotatable) bonds used now for cancer and AIDS research, one of original developers of the Java Language Spec (my part involved JDBC).

**Steven Gomez**

BS Computer Science, 2003  
Current employment: I am currently employed as a Senior Development Engineer with a local medical diagnostic company that I have been employed by for just over 21 years. Most of my responsibilities involve embedded systems programming; the educational foundation that I obtained from getting my degree from UMSL has been a great help in being better at what I do.  
Favorite things about UMSL: You can never go wrong by furthering your education. The CS professors manage to keep you pretty well challenged through the program.  
Adventures since graduation: I went on a cruise to Cozumel (and didn't want to come back)! But since I did return, I have since decided that I should continue my education and get a Masters in CS.  
Additional information: I now have two grandchildren. A grandson who is 9 years old and a granddaughter that is about 17 months.

**William Hoffman**

BA Mathematics, 2005  
Current employment: Tyco Healthcare, located in Maryland Heights. I work as a cyclotron operator in the imaging division.  
Favorite things about UMSL: The library and the professors.  
Adventures since graduation: Married soon after graduation and in the process of moving to Dallas to pursue a position in secondary education. The adventure continues.

**Thomas Lane**

BS Computer Science, 1995  
Current employment: Working at Reuters as a C++ software developer.  
Favorite things about UMSL: Just hanging out on campus.  
Adventures since graduation: Married a woman from Brazil and have visited the country a few times.  
Additional information: I've started a business on the web: [www.playguitarsolos.com](http://www.playguitarsolos.com)

**Monica Licklider**

BA Math and BS Secondary Education in August 2006.  
Current employment: I am a Teachers' Assistant for



Hazelwood School District. I provide small group and individual tutoring to ESL students.

Favorite things about UMSL: I liked the size of the campus and its location.

#### **Matt Loveland**

BS Computer Science, 1997

I also received an MS in Computer Science (Information Security) from James Madison University in 2001.

Current employment: I am employed at A.G. Edwards and Sons as a Senior Technology Engineer where I do work related to Business Continuity and Disaster Recovery solutions.

#### **Vamsidar Reddy Malgireddy**

MS Computer Science, 2005

Current employment: Software Engineer SPRINT, Kansas City

Favorite things about UMSL: MSC.

Adventures since graduation: I am a certified WebLogic System Administration.

Additional information: I am working as a Software Engineer and working as Primary Person for Managing an Application that does a Number Block Management System for SPRINT Wireless Numbers.

#### **Dennis McCarthy**

BA Math, 1968 (yes, that's 1968, a long time ago)

Current employment: I am a meteorologist in the National Weather Service, currently the Director of the Office of Climate, Water, and Weather Services at Headquarters in Silver Spring, Maryland.

Favorite things about UMSL: Obviously, the very early days, even before Benton Hall was built. All of the faculty offices and classes were in the old country club building. The small classes were great, and who could ever forget Ed Andalaft?

Adventures since graduation: I got into meteorology in the Air Force during the Viet Nam days. Math opened that door for me, and it has been an incredible career. I spent 26 years working in forecast offices in the National Weather Service, with plenty of "career events," but nothing like the evening we worked the F5 tornado in Oklahoma City when I was in charge of the forecast office in Norman, Oklahoma.

Additional information: It won't be too long before I retire and return to St. Louis. I am looking forward to that.

#### **Kevin Ottley**

BS Computer Science, 2006

Current employment: I am a Content Coordinator for the Internet Vertical Corp, a company encompassing over 150 online retail sites - <http://www.ivgstores.com>.

Favorite things about UMSL: The people. I love the faculty, the staff, the students with whom I've made lasting friendships.

Adventures since graduation: I was able to fly back to my home in Trinidad this month and enjoy the Carnival Season!

Additional information: I currently live in Miami, FL, where the head office of my company is located and should receive a sponsored work visa in October to continue my employment with the company.

#### **Marla Ozarowski**

BS Applied Math, BS Business Admin 1979

Current employment: I am Director of Technology Adoption at Freddie Mac, a publicly traded company chartered by Congress in 1970 to create the secondary mortgage market. Freddie Mac helps millions of Americans realize the dream of home ownership by keeping the mortgage market liquid and stable.

Favorite things about UMSL: Great professors, float trips with the staff of the Computer Center.

Adventures since graduation: I've traveled to China, Greece, and Italy.

#### **Veronica Rovira**

BA Math, 1991

Current employment: I teach high school math for St. Louis Public City schools.

Favorite things about UMSL: the small department feeling.

Adventures since graduation: lots of adventures, nothing spectacular comes to mind.

#### **William (Bill) Purington**

BA Mathematics, 1974

Favorite things about UMSL: Walking city blocks to English Comp class held in a residence near campus.

Adventures: I taught high school math 2003-2005 with MO temporary teaching certificate. I taught at Diamond HS near Joplin and Spokane HS near Branson.

Additional information: I love singing karaoke, line dancing, and 4x4 Jeeping.

#### **Tim Sullivan**

BS Computer Science, 1988

Current employment: Instructor, Department of Economics & Finance, Southern Illinois University Edwardsville

Favorite things about UMSL: My favorite memories of UMSL are of the time I spent working in the old Computer Science Lab in Clark Hall in the late '80s. I remember keeping the lab open late into the night so that my classmates and I could study for our exams and work on our programming assignments. At one point four of us formed an amateur rock band. After closing the lab we would bring our guitars, amplifiers, drums, etc. into a large lecture hall in Clark Hall, and put on impromptu concerts. I also fondly remember so many wonderful professors - especially Drs. Selesnick, Dotzel and Andalaft.

Additional information: I finished my Ph.D. in Economics at the University of Maryland in 1995.

#### **Yusuf Smith**

BS Computer Science, 1999

Current employment: I am currently a Web Programmer at MicroBilt Corporation in Atlanta (Kennesaw) GA. I develop and maintain the corporate website. The main focus of the company is providing credit information to businesses and individuals.

Favorite things about UMSL: I enjoyed the atmosphere of learning. To be around others seeking knowledge was and is very exciting.

Adventures since graduation: I've gotten married (the



biggest adventure according to my wife) and started a real estate business as well. Traveling across the country from Miami to New York and LA has been exciting also. Everyone is doing well and following their dreams.

#### **David Stamps**

PhD Applied Math, 2006

Current employment: Senior Statistician, Enterprise Rent-A-Car. I provide statistical support for company operations.

Favorite things about UMSL: Working with other students and faculty.

Adventures: Teaching at UMSL.

#### **Jayakumar Thandapani**

MS Computer Science, 2003

Current employment: Project Manager at Larsen & Toubro Infotech.

#### **Nathan Wang**

MS Computer Science, 2003

Current employment: BizInfo Service, Owner. Bizinfo is specialized in Internet marketing and consultation.

Favorite things about UMSL: Had a goal and a plan then worked hard to achieve it.

Adventures since graduation: Setup my own business

Additional information : Trust yourself, be confident and have a goal and a solid plan for the goal. Be persistence and stay with your plan.

#### **Rick Weis**

BA Mathematics, 1975

Current employment: Director, Finance Operations with Boeing. I have the responsibility to hire/train/ provide developmental opportunities for about 800 Business Employees in St. Louis.

Favorite things about UMSL: Hanging out with fellow students in the Student Union playing spades between classes.

Adventures since graduation: Getting married and having 4 children has been my biggest adventure. I'm still trying to figure out how to provide them the proper advice based on my life learned lessons.

#### **Joyce Wheeler**

BS Computer Science, 1989

Current employment: Boeing - Senior Manager Engineering Modeling and Simulation.

Favorite things about UMSL: Affordable, scholarships, professors in Math/CS.

Adventure since graduation: Several trips to South Korea, 2 week vacation in France.

Additional Information: Just established Modeling and Simulation as a discipline in the Systems Engineering Function at Boeing. Will complete MS in Systems

Architecting and Engineering through USC in May, 2007.

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