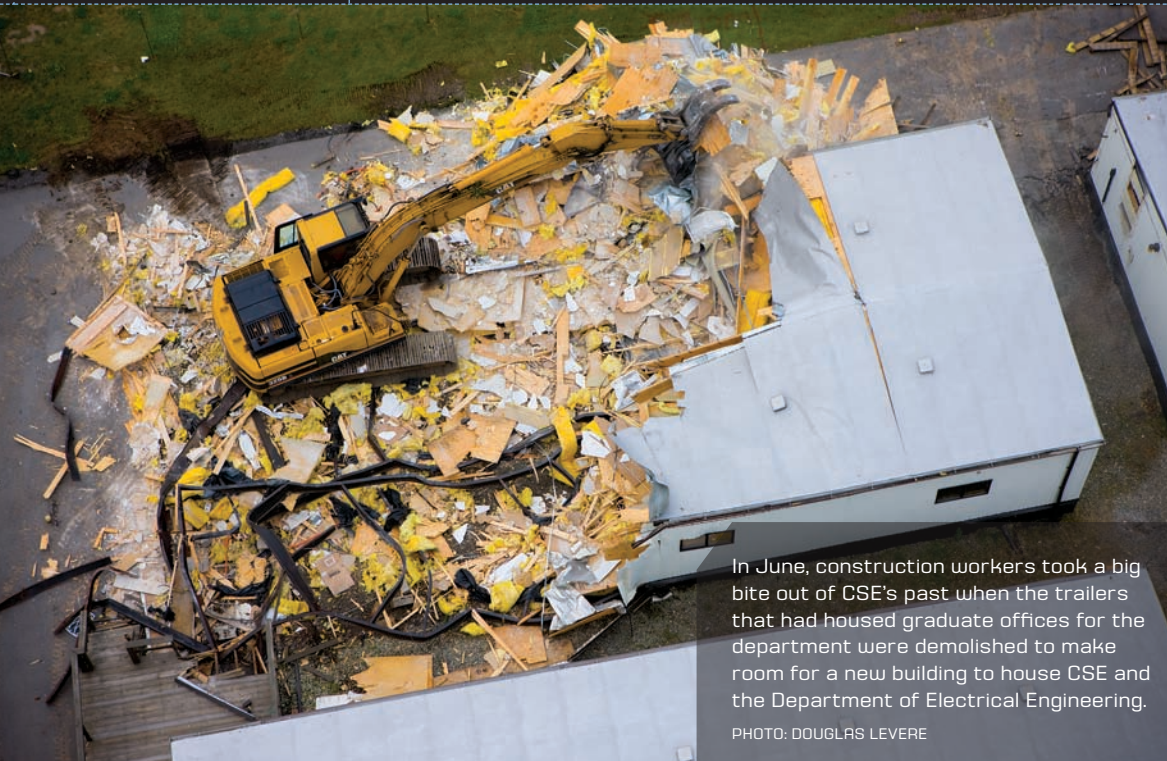


CHAIR'S MESSAGE  
P.02FACULTY PROFILE  
P.04ALUMNI REPORT  
P.05CSE-UGSA RETURNS  
P.08

NEWS FOR ALUMNI AND FRIENDS OF THE UB DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

# CSELINKS



In June, construction workers took a big bite out of CSE's past when the trailers that had housed graduate offices for the department were demolished to make room for a new building to house CSE and the Department of Electrical Engineering.

PHOTO: DOUGLAS LEVERE

## INTHEDEPARTMENT GONE FOR GOOD

Twenty years after it was constructed to serve the needs of the University at Buffalo's growing engineering programs, the Engineering Trailer Complex on UB's North Campus was demolished in June to make way for a new building for the departments of computer science and engineering and electrical engineering.

Department of Computer Science and Engineering graduate student offices have been moved to temporary quarters in Lockwood Library.

The demolition of the 10 trailers will clear the way for the groundbreaking next spring for a new building that will become the sixth in the engineering school complex.

"The new building will bring together under one roof CSE faculty, staff and students who are now dispersed across four buildings. This will create an improved sense of community and will foster greater collaboration among the research groups of the department," said Bharat Jayaraman, professor and chair of the Department of Computer Science and Engineering. "The new building will also greatly enhance UB's competitiveness in recruiting outstanding faculty and students."

The new building will modernize programs and facilities for the two departments. The planned 130,000-square-foot structure will boast a "clean

CONTINUED ON P02 »

## CSE R&D TELERADIOLOGY LICENSED

The local company Medcotek Inc. has signed a licensing agreement with UB for use of a new technology that will advance the company's entry into the lucrative teleradiology market.

Developed by Vipin Chaudhary, associate professor of computer science and engineering, the new 3D viewer and data-transmission system is designed to improve the transmission and diagnosis of X-rays and other radiological images sent over the Internet, a process known as teleradiology.

A shortage of radiologists nationwide has created demand for teleradiology technologies, particularly in remote areas where the shortage is acute, according to Medcotek CEO Frederic Zeigler.

The company has begun marketing a prototype of the new technology, which has capabilities that far exceed those of teleradiology products currently on the market, Zeigler said.

"This new technology will enable better and timelier diagnosis and treatment of patients," Zeigler explained. "Unlike other radiology solutions, this technology allows multiple radiologists to collaborate on a case seamlessly from different or remote locations."

"Our technology provides sophisticated image-analysis features, enabling collaboration across

CONTINUED ON P03 »



## MESSAGE FROM THE CHAIR

### GREETINGS FROM BUFFALO!

**T**he year 2008 marks the 10th anniversary of the formation of the CSE Department within the School of Engineering and Applied Sciences.

The past 10 years have been a period of unprecedented success and external recognition for faculty and students in the CSE department. Our success in research and funding has led to the formation of several new multidisciplinary centers, and in the past decade, CSE faculty have also developed an active research agenda in several bio-related topics in collaboration with colleagues at UB: bioinformatics, biomedical computing, biometrics, and medical image processing.

In the past few years, CSE faculty have played a leadership role in defining UB's strategic plan for research in information and computing technologies. Two research themes were identified under this plan: Enabling Discovery (High Performance Computing) and Smart Environments (Pervasive Computing). Coincidentally, the National Science Foundation also identified these same two areas in their recently announced initiatives on Cyber-enabled Discovery and Innovation and Cyber Physical Systems. These themes will build upon already existing strengths in CSE and will guide the development of faculty strength and collaboration across multiple decanal units, including engineering, architecture, arts and sciences, management, and law.

During the past academic year, the department completed a major survey of its programs as well as faculty and student research, conducted by the National Research Council (NRC). It also underwent an external review of its graduate programs and is also preparing for an external review (ABET accreditation) of its BS in Computer Engineering program—the BA and BS programs in computer science were reviewed in 2004. I am pleased to state that the academic programs of the CSE department are in excellent shape, thanks to our dedicated faculty and staff. We are also proud of our alumni, many of whom have made a mark in the field.

Lastly, on June 27, 2008, we took the first visible step towards our new home by celebrating the demolition of the trailer complex (see photo on front page). Groundbreaking for the new building will take place next year, and we look forward to occupying the building in 2011.

I hope you enjoy reading this newsletter, and I look forward to hearing from you.

With best wishes,

Bharat Jayaraman  
Professor and Chair

## INTHEDEPARTMENT

### CONTINUED FROM POI »

room” for intricate work with nanodevices; a “smart room” with sophisticated communication devices and natural interfaces; and flexible research labs, classrooms and meeting areas for interdisciplinary work.

New York State has embraced the engineering school's vision by providing \$49.6 million toward the \$73 million needed to build the structure. UB Engineering currently is engaged in a fundraising effort to generate the remaining \$23 million in private funds.

A simulation of the trailers disappearing and the new building rising can be viewed at <http://www.eng.buffalo.edu/dean/newbuilding.html>. It was created by UB staff.

Artist renderings of the new building, developed by the architectural firm Perkins+Will, are at <http://www.eng.buffalo.edu/newbuilding/drawings/>.

## CSE HEARS DISTINGUISHED SPEAKERS

The department's sixth annual Distinguished Speakers Series kicked off this past February when Brian Cantwell Smith of the University of Toronto spoke on the “halting problem” in foundational computing. In April four more speakers visited, including Prabhakar Raghavan of Yahoo! Research, Bernard Chazelle of Princeton University, Madhu Sudan of MIT and Raghu Ramakrishnan of Yahoo! Research.

“Our guests from Yahoo! Research discussed new directions in Web search engines and how they could be realized in practice,” says Alan Selman, professor of computer science and engineering and chair of this year's speaker series. “These were especially timely because the Web has today become our primary information source. They also spoke about the many technical challenges in modeling the user's intention, auction mechanisms, spam detection, etc.”

Chazelle and Sudan discussed the discrepancy method and semantic communication, respectively.

Sponsors of this year's series included Harris Corporation, an international communications and information technology company, and ATTO Technology Inc., a company based in Amherst, N.Y., specializing in storage connectivity and infrastructure solutions. It was Harris Corporation's third year as a sponsor, and the fifth for ATTO Technology Inc.

“We applaud the CSE department for organizing a forum that successfully brings together university scholars, industry representatives and very bright, high-energy graduate students for inspiring presentations and discussion,” says Michael Kurdziel, senior engineering manager at Harris.

“The Distinguished Speakers Series was started in 2002 and we have had four to five speakers every year since then,” adds Bharat Jayaraman, CSE department chair. “The series has been very popular with faculty and students, and we hope to continue it into the future.”



## GRADUATE RESEARCH SHOWCASE

The 21st Annual CSE Graduate Research Conference held on March 26 marked more than two decades of high quality, peer reviewed graduate student research in the department. Twenty-four scholarly presentations from students at UB and from other local institutions were chosen through a competitive process and then split into two separate sessions of 12 papers and posters.

Topics were on core areas, emerging theories, practical applications and interdisciplinary fields relevant to computer science. Cross-disciplinary projects were encouraged. For example, members of UB's artificial intelligence group worked with linguistics student Paul Heider on his paper, "Integrating Syntactic and Semantic Tools in Sfy: A Case Study in Lexical Acquisition."

This year's conference was organized by the Computer Science and Engineering Graduate Student Association (CSEGSA). It was sponsored by Bloomberg, a global media services firm in financial data, news and analytics; the UB Graduate Student Association (GSA); and the UB Graduate Indian Student Association (GISA).

This was the first year that the CSEGSA looked to outside corporate sponsorship in addition to support from other UB associations. "We'd like to get some more big-name sponsors again next year," says Jeffrey Czyz, the conference's organizing chair and CSEGSA's outgoing president.

Two speakers were invited to give talks at the conference. Gary F. Dischner, a certified senior IT architect at IBM, discussed IBM's on-demand strategies using Services Oriented Architecture software development. Michael D. Moskal, vice president of CUBRC's Information Exploitation Sector, described ongoing collaborative information technology development between UB and CUBRC.

"It was great to get a sense of research being conducted here with students in a professional setting," said Kenneth Regan, CSE associate professor, who served as one of the four faculty judges along with UB colleagues Jason Corso, Jan Chomicki and Michalis Petropoulos. "Many of the papers have already been judged by conference or journal reviews, and the quality shows," Regan says. "This is also a good experience for presenters and listeners alike to learn how best to convey ideas."

### Presentation prizewinners (and faculty advisors)


**First prize:** Denis Mindolin (Chomicki), "On the Contraction of Preference Relations"

**Second prize:** Mohit Virendra and Qi Duan (Shambhu Upadhyaya), "Detecting Cheating Aggregators and Report Dropping in Wireless Sensor Networks"

### Poster prizewinners

**First prize:** Seokhoon Yoon and Onur Soysal (Murat Demirbas and Chunming Qiao), "Coordinated Locomotion of Mobile Sensor Networks"

**Second prize:** Roman Yampolskiy (Venugopal Govindaraju), "Synthesis of Feature-Level Biometric Data"



Sargur Srihari has applied artificial intelligence to pattern recognition in areas ranging from handwriting (and now children's handwritten essays) to fingerprint recognition.

PHOTO: DOUGLAS LEVERE

remote locations without any proprietary hardware and software," Chaudhary said. "By adding workflow and providing this solution as an application service, it is a compelling solution for radiology groups."

### SOFTWARE GRADES HANDWRITTEN ESSAYS

Computer scientists in the department, led by Sargur N. Srihari, SUNY Distinguished Professor, have been working with colleagues in the Graduate School of Education to develop a computational tool that not only dramatically reduces the time it takes to grade children's handwritten essays, but also may help boost students' reading-comprehension skills.

The National Science Foundation recently awarded the UB researchers a \$100,000 grant to develop new algorithms that eventually could allow computers to take over the grading of children's handwritten essays.

The UB team published a paper on the project in the February/March issue of *Artificial Intelligence*. The project focused on handwritten essays obtained from eighth graders in the Buffalo Public Schools.

Three hundred of the essays were scored by human examiners on a scale of 0-6, with six being the highest score, and used as a "gold standard" against which 96 computer-scored essays were judged.

In 70 percent of cases, the UB researchers reported, the computer program graded the essays within one point of those graded by human examiners.

The UB research tackles significant artificial intelligence problems, said Srihari, director of UB's Center of Excellence for Document Analysis and Recognition, the world's largest research center devoted to developing new technologies that can recognize and read handwriting.

"We wanted to see whether automated handwriting-recognition capabilities can be used to read children's handwriting, which is essentially uncharted territory," he said.

Computational tools designed to evaluate essays that are typed, not handwritten, already exist, Srihari said. The sheer speed with which the program works—literally seconds per essay—is the most obvious advantage, the UB researchers said. —J.M.



AIDONG ZHANG

Zhang recently applied her interest in data mining and image search techniques to analyzing gene expression data derived from microarrays.

PHOTO: DOUGLAS LEVERE

# TOOLS FOR THE DATA MINER

by applying data mining techniques to geographic satellite data. Her interest in bioinformatics did not arise until Robert Straubinger, professor of pharmaceutical sciences, School of Pharmacy and Pharmaceutical Sciences, came to her with a problem: His research was generating an enormous amount of data using a then-brand new technology, microarrays, which can extract information on tens of thousands of genes from a single blood sample—far more than a human can comprehend without help from a machine.

“I saw then that maybe I wanted to get into something whose potential was so significant,” says Zhang, noting that while she’s always been interested in using computer science to solve “real problems” rather than theoretical ones, bioinformatics was not only appealing because the field was so wide open, but also because it held such great promise for those suffering from serious illnesses. Over time her focus went from designing algorithms that could scour millions of pixel variables for patterns suggesting specific geographic features—such as buildings, bridges or parking lots—to those that could locate patterns suggesting various genetic susceptibilities to disease in long strings of digitized DNA.

“In data mining terms, we’re looking for patterns, for relationships between genes and disease,” she says. “So if there’s

a group of people who all have breast cancer—and if they have a common pattern of genes—then those genes are probably the most significant ones for determining whether someone will have that disease.”

The principal investigator on a \$1.6 million grant from the National Science Foundation, entitled “Advanced Approaches for Integration and Analysis of Genomic Data,” Zhang says bioinformatics has brought her into close collaboration with biologists and chemists, doctors and pharmacists. She is also a co-PI on a \$2 million NSF grant that includes Herbert A. Hauptman, president of the Hauptman-Woodward Medical Research Institute, UB adjunct professor of computer science and engineering, professor of structural biology and a Nobel Prize winner in chemistry.

But although Zhang has learned a lot about biomedicine—she expects to complete her second book, “Analysis of Protein Interaction Networks: Computational Approaches,” for Cambridge University Press this summer—she says the main thrust of her research remains computer science—on creating complex algorithms that can unlock the mysteries hidden deep within virtual mountains of genetic data.

“After we’re done, the biologists are still going to have to look at the results and analyze them,”

she points out. “We’re just building the tools.”

In addition to her own research, Zhang serves as founding director and principal investigator of the Buffalo Center for Biomedical Computing (BCBC), which she established four years ago using a \$1.1 million grant from the National Institutes of Health.

“The function of the Center is to select the most promising projects and then distribute mini-grants—about \$20-30,000—to the most promising projects,” she says. “This is considered seed money. We’re trying to nurture projects—hopefully they will expand their research and gather external grants from other agencies.”

Thus far, Zhang says about 10 projects, including research in the School of Pharmacy and Pharmaceutical Sciences, School of Public Health and Health Professions and Roswell Park Cancer Institute, have benefited from the program. These are projects using information on a wide range of genetic diseases—from multiple sclerosis research involving patients at Buffalo General Hospital to breast cancer research involving volunteers with the Women’s Health Initiative, a large multicenter clinical trial and observational study that includes over 160,000 women across the United States, including nearly 4,000 in Western New York. —K.F

While she spent about half her UB career on problems at the intersection of computer and biological science, Aidong Zhang says she had good reason to wait so many years before entering the field of bioinformatics—there was no such thing when she first joined the university.

“I’m not sure bioinformatics even existed 10 years ago,” says Zhang, professor of computer science and engineering in the School of Engineering and Applied Sciences. “A decade ago there was no such term—or active research funding.”

When she first came to UB in 1994—straight from earning a doctorate in computer science from Purdue University—Zhang says she was mainly focused on improving image search technology, particularly

## CSE Links recently asked department alumni to let us know what they are doing. Here is what we heard from members of the CSE family, spanning the life of the department from its earliest days to its most recent.

### **Gina Bronkie Hammond, MS '73**

Gina is a director for Computer Sciences Corp. in Falls Church, Va., where she is extensively involved in proposal writing for government IT contracts. She recently has been asked to serve on the UB Engineering Dean's Advisory Council (DAC), where she is particularly interested in providing support to efforts for the new engineering building. Gina recently gave a donation for one of the computer science laboratories—to be named the Hammond Lab—that will be housed in the building. On a personal note, she enjoys gardening and baking, especially desserts.



Hammond

**William J. Kosina Jr., BS '73** Kosina is past president of the UB Engineering Alumni Association and is manager of facilities and motor rebuilding for the Raymond Corp. in East Syracuse, N.Y.

### **Steven E. Rubin, MD, BA '74**

Steve is chief of pediatric ophthalmology and directs the residency program in the Department of Ophthalmology at North Shore-Long Island Jewish Health System in Great Neck, N.Y. His research is in amblyopia, strabismus, and ophthalmologic findings in pediatric systemic disorders.



Rubin

**Ed Grenzig, BS '75** Ed is retired from a career in the digital imaging field and enjoys genealogy, photography, computer video and photo editing, running, bicycling, swimming, exercise, learning miscellaneous computer programs and home projects.

**Dale Petty, BS '75** Dale is an instructor in the electricity/electronics department at Washtenaw Community College, Ann Arbor, Mich. His professional interests include industrial automation (programmable logic controllers, motors and controls), HVAC controls, alternative energy and campus sustainability. Hobbies include cycling (commuting to work mostly), hiking and backpacking, playing folk music (guitar, fretted dulcimer, voice).

**David Braun, PhD '76** David is retired and living in Grand Rapids, Mich., and Bradenton, Fla., after serving as VP Information Systems for Sloan-Kettering Cancer Center, British Petroleum, Amway, Sherwood Medical. His hobbies are travel and reading.

### **Ted Thompson, MS '78**

Ted is a supervisory mathematical statistician in the Division of Diabetes Translation at the Centers for Disease Control and Prevention in Atlanta, Ga. His research involves applications of Bayesian statistical methods to public health problems, especially to diabetes-related problems. He enjoys hiking in the north Georgia Mountains and bicycling the roads of Atlanta.



Thompson

**Bob Girardi, BA '79** Bob is vice president of marketing and sales for SofTrek Corporation in Amherst, N.Y., where he is involved in technology marketing strategy, leadership development, new product development and software development. He likes to spend time with his family as well as cycling, running, martial arts, weight training, traveling to Europe and Asia.

### **Heinrich J. Stuetzgen, PhD, MS '79**

Heiner is Vice President of Research for NEC Europe Ltd. in Heidelberg, Germany, where he works with telecommunications, Internet and mobile communications. His hobbies include photography, hiking and biking.

**Doug Hillman, BS '82** Doug is president and CEO of Aerosonic Corp. in Clearwater, Fla., and a member of the IEEE Engineering Management Society, which relates to his research interests in organizational performance, teams and project leadership. "Unfortunately, it's tough to find time for hobbies," Doug writes. "However, when I do get out of the office, I enjoy fishing, golf, and hiking. One of the fun parts about my job (and career) has been the chance to travel to a variety of places around the world. For example, at one point I was able to spend

almost five years living in Germany while working for Moog."

**C.L. Max Nikias, PhD '82** Dr. Nikias is provost and senior vice president for academic affairs at the University of Southern California in Los Angeles, Calif., where he also holds the Malcolm R. Currie Chair in Technology and the Humanities. His research interests are digital signal processing and multimedia, and he enjoys biking, skiing, theater and reading history books.

**William F. Saunders, BS '83** William is a staff systems engineer at Lockheed Martin Corporation in Liverpool, N.Y. His research interests include radar, electronic warfare and simulation. Hobbies include hiking, pistol shooting and travel.

### **Jim Tyrrell, BA '84**

Jim is vice president of business voice products for Verizon in Ashburn, Va., where he is involved in the development and marketing of new technologies to business. In his spare time he enjoys bowling.



Tyrrell

### **Mary McGuinness, MS '86**

Mary is a software engineer of telecommunications for Alcatel-Lucent in Whippany, N.J. Her hobbies include lacemaking (she has been studying bobbin lacemaking for 19 years) and aviation; she enjoys flying with her husband and teenage daughter when there is time.



McGuinness

**Laurence Boxer, MS '87** Laurence is a professor in the Department of Computer and Information Sciences at Niagara University in Niagara Falls, N.Y., and has a nonpaying appointment as a CSE research professor at UB, where he studies algorithms, especially parallel algorithms, image processing, computational geometry and digital topology. His other passion is grandparenting.

**James Geller, PhD '88** James is a professor at the New Jersey Institute of Technology in Newark, N.J. His research



interests include medical informatics, medical ontologies and terminologies, auditing of ontologies and the semantic Web. As for other activities, he writes, "Two teenage children. No time for hobbies."

**Steve Mohl, BA '88** Steve is a senior principal software engineer at Symantec Corp. in Heathrow, Fla. His research interests include restoring Unix/Linux computer systems from scratch. The former UB varsity soccer player ('82-'83) still enjoys playing soccer, and plays tennis in USTA and local Central Florida leagues, and the drums.

**Steven Tylock, MS '90**

Steven is a self-employed turnaround IT consultant based in Rochester, N.Y. In his words, "You know how a company that is doing poorly will fire their CEO and bring in a 'turnaround CEO' to get things back on track? I'm like that, but with technology." He is working on a sustainability project to develop a Web-based application and service to help executives balance profitability, environmental factors, and social risks, and is conducting research on how the LinkedIn business social network benefits college students and other university audiences. Steven loves orienteering, and this past February competed in the NYS Winter Empire State Games for Ski Orienteering (in which he medaled last year).



Tylock

**Nick Codignotto, BS '92**

Nick is a research developer for Liquidnet Holdings Inc., in New York, N.Y. His main area of research is high-performance computing, specifically in the financial services sector. His interests include photography, video, tae kwon do and gaming.



Codignotto

**Thomas Hobika, BS '94** Thomas is vice president of solution engineering, enterprise services for Global Crossing Ltd., in Pittsford, N.Y. Thomas writes, "After my undergraduate study at UB I went on to work in the business world full-time for a number of years before returning to pursue my master's. I attended Rochester Institute of Technology for a Master of Science in Information Technology, and my coursework is complete but thesis still

outstanding. My passion towards research is oriented at high-speed Internet working with a special focus on anticipatory engaged communication services. My wife and I, along with our three children, enjoy spending time outdoors playing in our pool, skiing, bicycling, running, walking and just enjoying the beautiful weather in Western New York when it's here!"

**Johan Lammens, PhD '94** Johan is a senior color scientist for Hewlett-Packard LFP in Barcelona, Spain, where he works on nonstandard color separation and halftoning techniques for multicolor printing, and various issues in digital color management. He notes a "latent interest in randomness and other computational issues," and is about to begin classes in what will be his seventh natural language, Catalan.

**Dave Lundvall, BS '94** A senior sales consultant for Oracle in San Francisco, Calif., Dave focuses on Oracle's SOA, BPM, and Web 2.0 technologies. His activities include photography, travel, triathlons, and continually searching for the best Buffalo wings on the West Coast.

**Ram K. Krishnamurthy, MS '95**

A senior member of IEEE, Ram recently was promoted to senior principal research engineer at Intel Corporation's Corporate Technology Group in Hillsboro, Ore., where he presently heads the high-performance, low-voltage and integrated power delivery circuits research groups at Intel's Microprocessor Technology Labs. He also is an adjunct faculty member of the ECE Department at Oregon State University. His research interests are high-performance/low-power data-path, DSP and on-chip interconnect circuits.



Krishnamurthy

**George Klemic, MS '97**

George is an IT programmer analyst for RR Donnelley in St. Charles, Ill., where he works on printed customer products for companies such as Royal Caribbean Cruise Lines, eBay, and ConAgra Foods. He says he is most known outside work for playing tournament bridge; his best result to date is a second place finish in an open national event last summer.

**John J. A. Libront, BS '98** John is a principal software engineer at Thinkor-

swim Group in Boston, Mass., where he is currently researching how to improve dataset server performance for a C# trading application. His hobbies include skiing, trying to keep up in the cycling club as well as sailing, swimming and other "outdoor New England activities."

**Rick Stearns, BS '98** Rick is an advisory software engineer working on mainframe software test engineering for IBM in Poughkeepsie, N.Y. He also drums for local rock band Blue Coyote, and is an aspiring screenwriter/novelist.

**Mike Anello, BS '99** Mike is a developer at Fujifilm eSystems in Rochester, N.Y.

His research interests include music writing and performing as well as digital recording with various PC audio tools. His miscellaneous activities include footbag freestyle ([www.footbag.org](http://www.footbag.org)), singing and songwriting.



Anello

**Roger Chan, BS '99** Roger is an SW Engineer at Lockheed Martin in King of Prussia, Pa. His hobbies include rock climbing, biking, jogging and tai chi chuan.

**Gaurang R. Dave, BS '99**

Gaurang is a computer scientist and heads the Chemical Biological Radiological Development Section of the Naval Surface Warfare Center in Dahlgren, Va., where he studies chemical, biological and radiological modeling and simulation. He likes hiking, biking, social services and loves to travel with family, especially to beaches.



Dave

**Chun-Hsi Huang, PhD '01** Chun-Hsi is an associate professor of computer science and engineering at the University of Connecticut in Storrs, Conn., where he studies high-performance computing, algorithm design and analysis, cyber-infrastructure and computational biology.

**Vernetta Y. Marquis, BS '02**

Vernetta is an information systems security analyst for the United States Government Accountability Office in Washington, D.C., where she works on a wide range of IT



Marquis

security-related issues including security standards, compliance, policies, procedures and federal laws. She enjoys reading, working on her computer, watching movies, visiting museums and “hanging with friends.”

**Matt Mazur, BS '02** A senior technical analyst at Digitas in Boston, Mass., Matt is an active member of the Beantown North Bowling League and Beantown Softball League, and volunteers at Big Brothers Big Sisters of Massachusetts.

**Vishal Anand, PhD '03** Vishal is an assistant professor in the Department of Computer Science at the College at Brockport, State University of New York, in Brockport, N.Y. His research is primarily in computer networking, optical networks, wired and wireless networks, and computer and network security. His hobbies include traveling, playing squash, watching American football and ice hockey, and cricket.



Anand

**Lynn Chan, BS '03** A software engineer at Google Inc. in Mountain View, Calif., Lynn works on information retrieval and artificial intelligence. She also enjoys playing classical piano and ice skating.

**Patrick Quinlan, MS '03** Pat is a patent attorney for Hamilton, Brook, Smith & Reynolds P.C. in Concord, Mass., and enjoys traveling.

**Daniel Sireci, BS '03** Dan is a software engineer for CUBRC (Calspan UB Research Center) in Buffalo, N.Y. His hobbies include weight lifting, sports nutrition, and socializing.

**Jeffrey Fineberg, MS '04** Jeffrey is a database analyst for UB's administrative computing services (CIT), where he works on Oracle (Solaris), Microsoft SQL and Datacom (IBM Z/OS) platforms. He also is an adjunct lecturer for the informatics program at UB and an adjunct IT instructor at Bryant and Stratton College. In addition to staying current in database technology, he is pursuing music composition and performance and exploring areas of computer music, using the programming language Csound and other technology.

**Paul Gestwicki, PhD '05**

Paul is an assistant professor of computer science at Ball State University in Muncie, Ind. His research involves design patterns, interactive visualization, and computer science education. Paul also plays piano and likes “spending a lot of my time with my 1-year-old son, stacking blocks and making truck sounds. It's not really a hobby, but I enjoy it.”



Gestwicki

**Vinay Shah, MS '05** Vinay is a software development engineer in networking for Microsoft in Seattle, Wash. His hobbies include trekking and biking.

**Matthew Watkins, BS**

**'05** Matthew is pursuing a PhD at Cornell University with research interests in computer architecture and reconfigurable chip multi-



Watkins



**Sangjun Oh, MS '03**

Sangjun is a senior software engineer in enterprise Web architecture and development at Envision Interactive Group in Torrance, Calif. As for his hobbies, he writes, “I live in California! I love to run along the beach and usually go out and run during the weekend. I also like to take photos and travel.”

processors. He also is on the competitive ballroom dancing team at Cornell.

**Debanjan Ghosh, MS '06** Debanjan is a software engineer in the professional R&D division of Thomson Reuters Corp. in Rochester, N.Y. His research interests include machine learning and information extraction. Outside work, he enjoys foreign films and Beat literature.

**Joy Ghosh, PhD '06** Joy works for Technical Yahoo, Yahoo Inc. in Sunnyvale, Calif., in mobile wireless networks and social networking solutions. Outside work, she likes creating, playing and recording music, riding her bike, trekking and camping.

**Ariful Mowla, BS '07** A technical datafeed support engineer at Thomson Reuters in New York, N.Y., Ariful works on technical solutions for global business. He writes, “I have the responsibility to identify and resolve system-wide issues on a global market to network with clients. I am usually interacting with field engineers, communication technicians and end users via phone. I work on technically challenging projects to design, implement and manage specialized support technologies and activities aimed at improving the support experience of the customer from a global perspective.” Ariful also likes watching movies, staying active in sports, and “just enjoying the bright lights and the night life of the greater NYC environment.”

**Divyesh Shah, MS '07** Divyesh works on operating and distributed systems as a software engineer on the platforms kernel team for Google Inc. in Mountain View, Calif.

**Jordan Walbesser, BS '07** Jordan is a systems engineer for Dialogic in Getzville, N.Y. He also is enrolled in the Juris Doctor program at the University at Buffalo Law School, where he has been doing research on the legal repercussions of biometrics and their effect on the transferability of property/identity rights. He enjoys running in the summer and skiing in the winter.



# WELCOME BACK CSE-UGSA

CSE undergraduate Jake Joyce and a few friends were musing one day this spring at a meeting with the faculty advisors of the department's Peer Mentor Program about the fact that there didn't seem to be anything that ever brought CSE undergraduates together. They came to class and then dispersed. Is there anything to do about this sorry situation?

What this core group did was revive the dormant CSE Undergraduate Student Association. They put up notices and spread the word that there would be a meeting to restart the club. About 20 students showed up. Joyce and another student were nominated to be president; both made remarks and then Joyce won the vote.

At this first meeting they also decided to stage a picnic to "get people out of the woodwork," in Joyce's words. It was already spring and there wasn't much time before the end of the semester, but they wanted to get things started fast and go into the following year with some momentum. They secured a small grant from the department for



food, arranged a picnic ground (not so easily done on the busy campus), hung signs—and got a much bigger turnout than they'd hoped for.

So now they're off and running. The CSE-UGSA, whose membership is about evenly split between computer science and computer engineering majors, has a desk in an office in Bell Hall that they share with the student chapter of the Association for Computing Machinery. And they have the beginnings of a plan for 2008-09: raise some funds (not sure how), create a tutoring service, perhaps stage a hacking competition, and definitely throw another picnic.

## How do you get the undergrads together?

Serve them hot dogs and hamburgers. After a two-year hiatus, the CSE Undergraduate Student Association came back to life with a picnic for faculty and students on an early spring day. They have big plans for next year.



## CSELINKS

NEWS FOR ALUMNI AND FRIENDS OF THE UB DEPARTMENT  
OF COMPUTER SCIENCE AND ENGINEERING

The University at Buffalo is a premier research-intensive public university, the largest and most comprehensive campus in the State University of New York system. UB's more than 27,000 students pursue their academic interests through more than 300 undergraduate, graduate and professional degree programs. Founded in 1846, the University at Buffalo is a member of the Association of American Universities.

CSE Chair: BHARAT JAYARAMAN  
Executive Officer: MARIANNE SULLIVAN

Editorial: JUD MEAD, LAUREN NEWKIRK MAYNARD  
Design: CELINE TAN

CSELINKS is published two times a year. Produced by the Office of University Communications, Division of External Affairs, University at Buffalo. Summer 2008. 08-CSE-002.

Nonprofit Org.  
U.S. Postage  
PAID  
Buffalo, NY  
Permit No.311