

Department of Computer Science

Spring 2007

Alumna on USA Today All-Academic Team

Recent NMSU graduate Marzyeh Ghassemi was named to USA Today's All-USA College Academic Team Wednesday, Feb. 15.

Ghassemi, who was honored at NMSU's December 2005 commencement ceremony as the outstanding



Marzyeh Ghassemi

senior for both the College of Arts and Sciences and the College of Engineering, was named to USA Today's College Academic Second Team.

Started in 1996, the program hon-

ors undergraduates who not only excel in scholarship, but also extend their intellectual abilities beyond the classroom to benefit society. Twenty students each were named to the first, second and third teams based on their grades, academic rigor, leadership, activities and an essay describing their most outstanding intellectual endeavor while in college.

Ghassemi, who is working as a rotational engineer in the digital health group at Intel, wrote her essay about the use of neural networks in health care today.

"I believe digital health is of huge importance to the human condition," Ghassemi said. "I believe that using a neural network to make an advance diagnosis will speed health care, lower medical costs, reduce errors and allow doctors to focus on tasks that computers are not capable of."

Ghassemi plans to pursue a doctorate in biomedical engineering and use her knowledge to push medical improvements into industry for development as modern, affordable devices.

"We are proud of Marzyeh. She is a special student and deserves this prestigious national recognition," said Jason Ackleson, director of the Office of National Scholarships. "This award also demonstrates that NMSU's best and brightest students can compete and win on the national stage."

Ghassemi was enrolled at NMSU

at the age of 15 after being home schooled at an early age by her mother, Maryam Ghassemi. She said she wanted to learn to read at the age of four when another girl teased her that she couldn't.

Her father, Abbas Ghassemi, is the director of the NMSU-based WERC, a consortium for environmental education and technology development.

Ghassemi initially began pursuing a degree in electrical engineering, but she enjoyed taking a programming class so much that she declared computer science as a second major. She then learned she would only need a few more classes to have a mathematics degree, so she added it as well.

Ghassemi graduated with a grade point average of 3.9 and was a 2005-06 Goldwater Scholar. She has served as president of the NMSU Institute of Electrical and Electronic Engineers, ambassador for the NMSU College of Engineering and president of Alpha Chi honor society. She has volunteered with the Dona Ana County Detention Center as a math teacher, the Community Action Agency of Southern New Mexico, Dona Ana County Teen Court, Jardin de los Ninos and NMSU Habitat for Humanity.

The honorees in USA Today's 17th annual undergraduate recognition program were selected from more than 600 nominees.

Computer Bytes

Computer Bytes is a production of the Computer Science Department of New Mexico State University, produced once a year, in the Fall semester.

Written and produced by the Computer Science Department faculty and Staff.

Edited by Roger Hartley.

For past issues or for copies of this issue, please contact csoffice@cs.nmsu.edu, or call (505) 646-3723.

Also available online at www.cs.nmsu.edu.

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Message from the Chair

Dear friends,

As we near the end of 2006, I am delighted to communicate with you. It has been another successful year for the Computer Science department.

In this issue of Computer Bytes you will read about many exciting activities that are going on in the department. The Center for Bioinformatics continues to provide opportunities for students ranging from high school to doctoral programs to experience the excitement of the field. This summer the Center facilitated a 10-week research experience for a junior faculty member and two undergraduate students at Oakridge National Labs. The Center researchers obtained an NSF grant to work with Mesa Analytic of Albuquerque to work on Cheminformatics/Bioinformatics Web Educational materials. Summer camps supported by the Center provided Bioinformatics experience to 35+ high school and tribal/community college students. The faculty, students and staff in the department continue to excel. CS student Marzyeh Ghassemi received the College of Arts & Sciences Outstanding Senior award in Fall 2005. CS student Joel Pfeiffer has been selected as the Outstanding Senior for the College of Arts & Sciences in 2006! Given that the College has 23 departments, this is truly remarkable. Three faculty members from the department (Esther Steiner, Enrico Pontelli and yours truly) were awarded College of Arts & Sciences Outstanding Faculty Achievement Award. Ivan Strnad received the Outstanding Professional Employee Award in the College. Several graduate students received scholarships and tuition awards from the graduate school. As always, our undergraduate and graduate student organizations continue to be active in organizing events and performing community service.

This year, the department faculty were successful in obtaining several external grants. An NSF grant awarded to Dr. Amiya Bhattacharya and others will help build the infrastructure for sensor network research in the department. A grant awarded to Dr. Enrico Pontelli and others will support activities to encourage high school women to choose careers in computing. A grant from USDA will allow Dr. Joe Song to work on more efficient Bioethanol production. NMSU is also a key participant in the Computing Alliance of Hispanic Serving Institutions that has been set up through a \$2.8 million grant from NSF and that will support initiatives to increase participation of Hispanics in the computing professions. Dr. Jonathan Cook will collaborate with researchers at Georgia Tech to conduct research in Software Engineering with support from NSF. Dr. Jing He and Dr. Enrico Pontelli are working with researchers at Mesa Analytic to develop Educational Web tools for Cheminformatics/Bioinformatics. Obviously, the projects supported by these grants will provide excellent opportunities to the graduate (and undergraduate) students to conduct exciting research and be paid for it!

As always, our alums also continue to make us proud. Andrew Baca, an NMSU-CS graduate and currently President and CEO of Albuquerque-based Abba Technologies Inc., was named 2006 Minority Male Entrepreneur of the Year by the U.S. Department of Commerce. Shamim Akhtar who received his MS from CS-NMSU has recently co-authored the first text on Multi-Core Programming. We have been very fortunate to have the support of our alums over the years. This has helped us establish several scholarships in the department which support excellent and needy students. We have also established two endowed funds to support faculty development. I encourage you to help departmental developmental efforts by contributing to any of the established endowed funds or, better still, by establishing a new endowed fund to support students and faculty in the department.

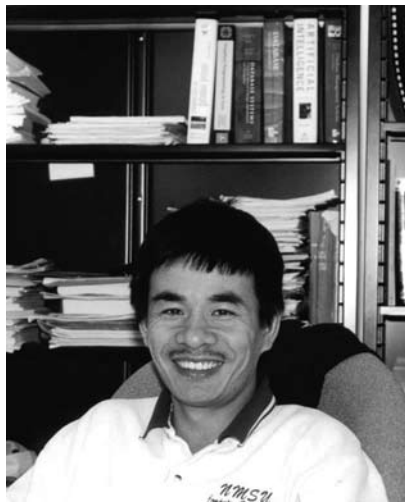
I hope you will enjoy this newsletter and delight in how our department has evolved and grown over the last year.

Desh Ranjan

Faculty News

Son Tran gets tenure

Son Cao Tran, who has been on the CS faculty since 2000, was awarded tenure and promoted to Associate Professor last May. Professor Tran received his Dip-



Dr. Son Tran

lom Mathematiker degree in Mathematic Cybernetics and Computing Technique in July 1987 from the Technical University of Dresden, Germany and his Master's and Ph.D. degrees in computer science from Asian Institute of Technology, Thailand and University of Texas at El Paso in 1993 and 2000 respectively. Before joining the Computer Science Department at New Mexico State University as an Assistant Professor in 2001, he was a post-doctoral student at the Knowledge Systems Laboratory, Computer Science, Stanford University. He was a recipient of the Outstanding Dissertation Award of the University of Texas at El Paso in 2001.

His primary research interests are in Knowledge Representation and Reasoning, Logic Programming, Commonsense Reasoning, Planning and Plan Verification, and Intelligent Agents.

Department Wins IGERT Grant

The department is the recipient of an IGERT grant from the National Science Foundation. IGERT is Integrative Graduate Education and Research Traineeship. Faculty member Enrico Pontelli headed the effort which will provide support for graduate students during their studies.

The mission of the IGERT National Recruitment Program is to help students find the IGERT program that is right for them, and help IGERT faculty and PIs find the students that are right for their programs. The IGERT program has been developed to meet the challenges of educating U.S. Ph.D. scientists, engineers, and educators with the interdisciplinary backgrounds, deep knowledge in chosen disciplines, and technical, professional, and personal skills to become in their own careers the leaders and creative agents for change.

The program is intended to catalyze a cultural change in graduate education, for students, faculty, and institutions, by establishing innovative new models for graduate education and training in a fertile environment for collaborative research that transcends traditional disciplinary boundaries. It is also intended to facilitate greater diversity in student participation and preparation, and to contribute to the development of a diverse, globally-engaged science and engineering workforce.

Department in Alliance for Hispanic Students

The department has joined with the Universities of Texas at El Paso, Florida International

and Puerto Rico, Mayaguez to form an alliance for broadening participation in computing for Hispanic students. Desh Ranjan was the NMSU/CS lead on the grant which is from the National Science Foundation. From the NSF web site: "The Broadening Participation in Computing (BPC) program aims to significantly increase the number of U.S. citizens and permanent residents receiving post secondary degrees in the computing disciplines. Initially, its emphasis will be on students from communities with longstanding underrepresentation in computing: women, persons with disabilities, and minorities. Included minorities are African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, and Pacific Islanders. The BPC program seeks to engage the computing community in developing and implementing innovative methods to improve recruitment and retention of these students at the undergraduate and graduate levels. Because the lack of role models in the professoriate can be a barrier to participation, the BPC program also aims to develop effective strategies for identifying and supporting members of the targeted groups who want to pursue academic careers in computing. While these efforts focus on underrepresented groups, it is expected that the resulting types of interventions will improve research and education opportunities for all students in computing."

Amiya Bhattacharya wins first grant

Assistant Professor Amiya Bhattacharya recently won his first grant from the National Science Foundation. His proposal, in the competitive area of sensor networks is entitled "Infrastructure for Networked Sensor Information Tech-



Amiya Bhattacharya

nology” and the grant is for three years in the amount of \$498,000.

The project, developing a series of sensor networking testbeds in New Mexico, focuses on the use of wireless sensor networks in the following applications: tracking, controlling, and behavioral monitoring of livestock on rangeland; micro-monitoring of weather and climate on an ecological research site; protecting contextual privacy of distributed sensing tasks; developing component-based middleware engineering for embedded sensor nodes and gateways; creating an integrated sensor net design environment and testbed, and developing a real-time collaborative virtual environment for smart office design and distance learning. Collaborators include Jon Cook and Clint Jeffrey of CS, Derek Bailey of the department of Animal and Range Science, and Debra Peters of the USDA and the Biology department.

Obituary

J Mack Adams

On Sunday, December 17, 2006, J Mack Adams sustained fatal injuries during a bicycling accident in Las Cruces. He was born in Marfa, Texas on August 14, 1933, the oldest son of Albene Hughes Adams

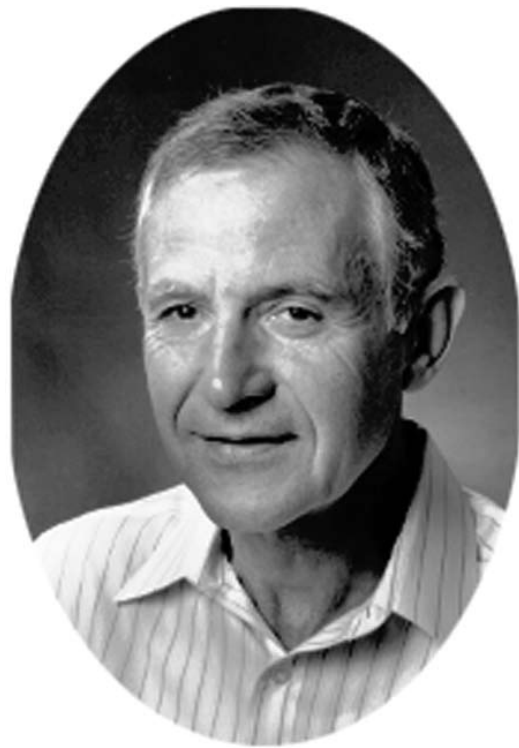
and G.W. (Monk) Adams, who recently preceded him in death. J Mack is survived by his loving wife of 55 years, Joe Ann Adams, his sons Mack and wife Theresa, Mark and wife Karla, brother Robert Lloyd Adams and wife Lourdes, granddaughters Natalia and Danielle Adams, grandsons Dustin and Joshua Adams, great-granddaughter Catalina Adams and niece Jessica Adams.

J Mack’s early years were spent in Shafter, Texas. Because his father worked for the US Corps of Engineers during World War II, J Mack lived in and attended school in many places in Texas and Louisiana, perhaps leading to his love for travel. J Mack graduated from Fabens High School in 1950. His education was just beginning; he proceeded to earn a BS in Electrical Engineering from Texas Western College in 1954, and his MS and Ph.D. in Mathematics at NMSU. After obtaining his undergraduate degree, he went to work for Westinghouse in Pittsburgh, PA where his interest in computers began. He worked at White Sands Missile Range as a mathematician and technical director of Electronics Research and Development Activity. He briefly taught at Texas Western College before beginning his long and distinguished career at NMSU. In July

1965 he organized and directed the founding of the NMSU Computer Center and later founded one of the country’s first programs in Computer Sciences at NMSU and was department head of Computer Sciences for many years. He once stated his most satisfying accomplishments were advising the college’s earliest master’s and doctoral degree recipients in computer science. He later became the Associate Dean and Research Center Director in the College of Arts and Sciences, a position from which he retired in

1993. In addition, J Mack had a Senior Fullbright Lectureship in Santiago, Chile in 1972, was a visiting professor at Wolfson College, Oxford University in 1978, and reviewed grant proposals with the National Science Foundation in Washington DC for two years. During his career, J Mack produced a large number of publications including books and papers that were published by science and mathematical organizations. He was a strong believer in science and education, and was a member of numerous professional organizations.

J Mack lived an extremely active life. He was a marathon runner, running



J Mack Adams

among others, the Boston and New York Marathons. In addition, he was a tennis player, softball player, swimmer, bicyclist, mountain climber and participated in several mountain rescues. For many years, he was very involved in the Senior Olympics as a participant and volunteer. Until his death, J Mack participated in triathlons, including the prestigious Ironman triathlon in Hawaii in 2004; setting an example of health and an active lifestyle to all who knew him.

Departmental Events

2006 Computer Science Summer Camps

With funding from the National Science Foundation, the 2006 Computer Science Summer Camps took place during SSII. This year, the five week College Camp and the two week High School Bioinformatics Camp were joined by a new component, Young Women in Computing (YWinC), which also took place for five weeks. The grants that provide support for these camps include CREST, MII and ATE; the principal investigators of these grants are Drs. Desh Ranjan, Enrico Pontelli and Clint Jeffery. The 2006 summer program staff included Phillip Arguello, Julie Maestas, Angela Acosta, Manuela Telbis and Rachel Jensen, with management assigned to the assistant director for outreach programs, Linda Sandoval, M.A.

The camps opened in July with a



Some of the students from Native American colleges in New Mexico

total of 8 college students from various tribal and community colleges (San Juan College, Northern NM College, UNM-Gallup, Crownpoint Institute of Technology, and Dine College-Tsaile, AZ, and Santa Fe Community

College); 20 local co-ed high school students (Mayfield High School, Onate High School, Las Cruces High School, Mesilla Valley Christian Schools, and home-school settings), and 12 local high school females (also from the aforementioned local schools).

Applicants of all camps must meet entrance criteria which include a GPA of 3.0 and above as noted on their transcripts, coursework in the sciences (to include math for college participants), letters of recommendation from educators familiar with their work, and a brief essay stating why they think they would benefit from attending the camp. The college camp is open to students who attend community college (usually from out-of-town). The camps involving high school students are exclusive to local students attending Las Cruces area high schools, or alternative educational environments, such as a private school or home-school setting. Plans are underway for 2007 to include local college students as well as high school students from neighboring rural areas.

As participants of the College and YWinC camps, students have



Girls from local High Schools: Mayfield, Las Cruces, Onate and Mesilla Valley Christian

the opportunity to receive exposure to computer science instruction in various areas. The college group receives Java programming, web design, discrete math for computer science, and bioinformatics. The YWinC group receives Alice programming, robotics, web design and bioinformatics. During their time at the CS department, the three camps merge when the bioinformatics participants arrive for their two week training. All groups collaborate on a research project which culminates with a conference-caliber poster presentation to the participants' peers and family, as well as CS faculty and staff, and the university community. A few of the research titles included: Tuberos Sclerosis – Outcome of TSCI Gene Mutation (Alejandra Carrasco, Monica Baldauf, Jerry Yeh); Chronic Lymphocytic Leukemia – BCL2 (Taylor Ferguson, Rebecca Casteel, Hannah Walker), and ARNT and its Relation to Acute Myeloblastic Leukemia (Daniel Parrott, Estela Magallanes, Marissa Padilla).

Feedback from the parents was highly favorable; many parents expressed sincere gratitude for the opportunity extended to their son or daughter to undertake the challenge involving research of a specific topic, running DNA sequences, working with microarrays, running gels in a laboratory setting, and ending in designing a poster. Parents of the Young Women in Computing group were also extremely pleased, as they witnessed the daily excitement expressed by their daughters as they learned programming, robotics, web design and bioinformatics.

Other activities for the college camp included a game night for participants which gave faculty a chance to join in some fun as both groups challenged each other with games such as chess, Scrabble, dominoes, and Sudoku, to name a few. On another night, one of the participants, Roger Palmer, (SJC) gave a presentation on a programming game he wrote which involved horse racing. Roger also shared his other artistic talents by showing the group slides of various sketches and artwork he had authored, along with an animated short he put together.

Although a trip to the White Sands National Monument was cut short due to intense wind and sand storms, the students made the best of their short visit by making sand tunnels and enjoying the picturesque white dunes.

The bioinformatics camp ended in late July with a reception for the participants in the Science Hall Foyer; student teams presented their research posters. The College and Young Women in Computing camps ended in early August, with a banquet honoring both groups. The YWinC participants proudly presented their programming projects to parents, peers, guests, faculty and staff.

CS Department Welcomes Networks Pioneer

Radia Perlman, distinguished Engineer at Sun Microsys-



Dr. Radia Perlman

tems, presented a public lecture, “Ten Things I Learned About Computer Networks and Life,” on Oct. 24. Dr. Perlman provided an overview of her work and career, and the impact her work has had on the way networks work today.

The lecture was part of a three-day series of seminars, lectures and meetings held Oct. 23-25 hosted by the NSF-ADVANCE Program and sponsored by the Department of Computer Science. Perlman presented a research seminar, “Data: How to Make It Be There When You Want It and Go Away When You Want It Gone,” at on Oct. 23, in Science Hall.

Perlman’s work in routing protocols has had a profound impact on the Internet. Her spanning tree algorithm is used by all bridges and switches, and her contributions to routing protocols make the routing protocols in the Internet today scalable and robust.

She also launched “tangible computing” in the early 1970s. This process involved making the concepts of programming comprehensible (even to preschool children). She is the author of “Interconnections: Bridges, Routers, Switches, and Internetworking Protocols” and co-author of “Network Security: Private Communication in a Public World,” both textbooks used in many universities and popular as reference books for engineers. She has a Ph.D. from MIT.

The ADVANCE Visiting Professors Program seeks to bring about increased interaction between nationally recognized female scholars and students of all ages. During her visit, Dr. Perlman met with students and faculty to discuss her career and research.

Department holds Workshop on Formal Systems

The NMSU Computer Science department has successfully organized the Eighth International Workshop on Descriptive Complexity of Formal Systems (DCFS 2006) at the NMSU campus in Las Cruces on June 21-23, 2006.

Israel), Victor Mitraná (Tarragona, Spain), Bala Ravikumar (Sonoma, USA), Arto Salomaa (Turku, Finland), Detlef Wotschke (Frankfurt/Main, Germany) and Sheng Yu (London, Canada).

DCFS 2006 was jointly organized by the IFIP Working Group 1.2 on Descriptive Complexity and the Department of Computer Science of New Mexico State University. Additional financial support was provided by College of Arts and Sciences of New Mexico State University, and

Jeffery Shallit (University of Waterloo).

The 284-page proceedings is published as a NMSU Computer Science technical report. Among the contributed papers, thirteen papers were selected for publication in a special issue of the Theoretical Computer Science journal with Hing Leung and Giovanni Pighizzini as guest editors.

The success of DCFS 2006 would not have been possible without the dedicated local organizational work by Mariette Meador, Jenny Griffith, Brian



Attendees to the Workshop on formal systems assemble in the lobby of Science Hall. Hing Leung is second from the left of the right-hand group.

Hing Leung (NMSU) and Giovanni Pighizzini (University of Milan, Italy) were the program co-chairs of an international program committee, consisting of Cristian Calude (Auckland, New Zealand), Jean-Marc Champarnaud (Rouen, France), Erzsebet Csuha-j-Varju (Budapest, Hungary), Juergen Dassow (Magdeburg, Germany), Viliam Geffert (Kosice, Slovakia), Jonathan Goldstine (State College, USA), Juraj Hromkovic (Zurich, Switzerland), Oscar Ibarra (Santa Barbara, CA), Lila Kari (London, Canada), Orna Kupferman (Jerusalem,

Department of Computer Science of University of Texas at El Paso.

Twenty eight papers were submitted by a total of fifty authors from seventeen different countries. From these submissions, on the basis of three referees' reports, the program committee selected fifteen regular papers and seven short papers. In addition, there were four invited papers (and presentations) by Lane A. Hemaspaandra (University of Rochester), Luc Longpre (University of Texas, El Paso), Andreas Malcher (University of Frankfurt, Germany) and

Cloteaux, Hing Leung and Desh Ranjan.

Among the registered participants, there were eight from Canada, seven from USA, four from Germany, four from Italy, three from Switzerland, two from Portugal, one from Hungary and one from China. A few graduate students from UTEP and NMSU also attended the workshop.

The program consisted of presentations of papers, and a full social calendar including trips to local beauty spots and a banquet.

Research News

Highlights of Activities Conducted in the KLAP Laboratory

Educational Initiatives

Members of the KLAP laboratory organized the Second International Doctoral Consortium in Logic Programming. The event took place in Seattle, WA, in August 2006. It

featured six doctoral students, including our own Tu Phan (see photograph).

The KLAP investigators developed and offered a brand new course on Semantic Web Programming. The course was well-attended (17 students signed up for it).

Research Activities

This was a very productive year for Dr. Tran and Dr. Pontelli. They published 10 papers in the most well-reputed journal and conferences in the field of Artificial Intelligence, including AAI, ACM Transactions on Computational Logic,

Theory and Practice of Logic Programming, Knowledge Representation.

New research projects have been launched, including

- the development of a suite of conformant planners
- the development of a parallel planning system
- the development of an integrated programming environment for Prolog and Answer Set Programming
- A new answer set solver for logic programming with aggregates

(continued on next page)



Tu Phan, third from left, with attendees to the Second International Doctoral Consortium in Logic Programming

Organization Activities

Dr. Tran and Dr. Pontelli co-chaired the First International Workshop on Preferences and their Applications in Logic Programming Systems, Seattle, WA, August 2006.

Dr. Pontelli co-chaired (with Dr. Guo from the University of Nebraska at Omaha, and former member of KLAP) the 2006 Colloquium on Implementation of Constraint Logic Programming Systems, Seattle, WA, August 2006.

Visits

The KLAP laboratory hosted many visitors during the year:

- Dr. Hermenegildo (Polytechnic University of Madrid)
 - Dr. Winsborough (University of Texas at San Antonio)
 - Dr. Dovier (University of Udine)
 - Dr. Dal Palu (University of Parma)
 - Dr. Ferreira (University of Porto)
 - Dr. Balduccini (Texas Tech University)
 - Dr. Baral (Arizona State University)
-

Travel

The investigators conducted a number of visits and conference trips, including

- A 2-week visit of the University of Western Sidney, Australia (Dr. Tran)
 - A visit of the University of Porto, Portugal (Dr. Pontelli)
 - Repeated visits to Arizona State University (Dr. Tran & Pontelli)
 - Participation to the International Conference on Logic Programming, Seattle, WA (Dr. Tran & Pontelli)
 - Participation to the RuleML conference, Athens, GA (Dr. Tran)
 - Participation to the AAAI Conference, Boston, MA (Tu Phan and Son To)
 - Participation to the Google Faculty Summit, San Jose, CA (Dr. Pontelli)
-

Highlights of Activities in the PLEASE Laboratory

The Laboratory for Programming Languages, Environments, And Software Engineering (the PLEASE Lab) is directed by Associate Professor Jonathan Cook, and is currently made up of five graduate students working hard on projects related to dynamic software updating, runtime monitoring, and new services for native binary applications. The Hercules framework for software updating is a framework that supports runtime updating of compiled C++ applications, and it is being finalized and evaluated for lessons learned and future spinoff research ideas.

A new effort in runtime monitoring is SHARM, Software and Hardware-Assisted Runtime Monitoring, a joint research effort with Georgia Tech and North Carolina State University. The SHARM project is funded by a collaborative grant from the National Science Foundation; NMSU's part is to provide OS and binary-code monitoring expertise, and we are already leveraging the Hercules code base to do this. Finally, one student, Abdulmalik Al-Gahmi, is creating a new binary object/executable file format and corresponding linker/loader infrastructure that is extensible and will support a variety of runtime services, such as reflection, security, and composability.

Highlights of Activities in the CREST Center

2006 has been an exciting year for the NMSU CREST Center for Bioinformatics and Computational Biology. The Center researchers continue to conduct research that will help

answer important biological questions. For example, Dr. Jing He and her colleagues and students are developing computational methods and techniques that will help determine the 3-dimensional structure of complex proteins. Another group of researchers (Dr. Ranjan, Dr. O'Connell, Dr. Gopalan) is developing computational tools to assist in identification of parts of genomes responsible for regulating specific functions in plants. The tools have been used to help identify regulatory elements responsible for regulating pungency in chile peppers (in true New Mexico Aggie spirit!) and to help design experiments to identify regulatory elements for nitrogen assimilation. Additionally, Center researchers are developing computational tools to model evolution of pathogens and computational tools that will help simplify oft-used analyses like phylogenetic inference for life scientists.

The Center enabled a number of other activities and external grants this year. An NSF-FaST (Faculty and Student Team) supplement to the CREST grant allowed Center researcher, Dr. Joe Song and two undergraduate students, Eric Lance and Chris Lewis, to spend an exciting ten weeks in summer at Oakridge National Labs conducting Bioinformatics research. An NSF-SBIR grant is allowing Dr. Jing He and Dr. Enrico Pontelli to work with scientists at Mesa Analytic in Albuquerque on developing educational tools for Bioinformatics/Chemoinformatics.

The Center is leading the effort to establish a Bioinformatics Masters program at NMSU which should become a reality by Fall 2007. The Center continues its strong outreach activities. In summer 2006, thirty two High School students and several tribal and community college students were provided a 2-week hands on exposure to Bioinformatics. The Center also organized a one-day workshop to provide high school teachers with basic bioinformatics materials and training in Spring 2006. To summarize, the Center has continued its strong research, educational and outreach efforts in 2006.

CS Faculty

Desh Ranjan, Department Head, Professor
Amiya Bhattacharya, Assistant Professor
Jonathan Cook, Associate Professor
Roger T. Hartley, Associate Professor
Jing He, Assistant Professor
Hing Leung, Associate Professor
Joseph J. Pfeiffer, Jr., Assistant Professor
Inna Pivkina, Assistant Professor
Enrico Pontelli, Associate Professor
Joe Song, Assistant Professor
Esther Steiner, College Professor
Son Cao Tran, Associate Professor
Karen Villaverde, College Assistant Professor

Adjunct, Part Time, and Emeritus Faculty

Richard Dale, College Associate Professor - Part Time
D. Hue McCoy, College Professor - Part Time
John B. Johnston, Professor - Emeritus
Gopal Gupta, Professor - Adjunct
Arthur I. Karshmer, Professor - Adjunct
Janyce M. Wiebe, Associate Professor - Adjunct
John Barnden, Professor - Adjunct
Shaun Cooper, Assistant Professor - Adjunct
Jim Cowie, Professor - Adjunct
William Ogden, Adjunct
Ron Zacharski, Adjunct

CS Staff

Ivan Strnad, Manager System Support - Computer Operations Group
Mathew Hulin, Analyst II - Computer Operations Group
Mariette Mealor, Secretary III - Computer Science Office
Jenny Lee Griffith, Secretary II - Computer Science Office

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Giving back to the department

Fifteen years ago, the Computer Science department had one VAX minicomputer (remember those?) and a bunch of terminals. Punched cards were still in use in the computer center.

Now we are in a new building, with hardware that is the envy of many computer science departments. We have a large laboratory for teaching, and special labs for graduate students and research programs. We are putting the finishing touches to a state-of-the-art computer classroom. Every teaching assistant has an up-to-date machine, and every faculty member has a fast workstation on his desk.

So are we happy? Well, yes ... and no. Maintenance of this large network

of heterogeneous platforms (Linux, Solaris, SunRay, Mac, Windows) is a technical nightmare for our computer operations group. Monitors wear out, disk drives crash, machines break, networking cables die. It all requires money to keep the system going at full strength.

In addition to hardware maintenance costs, we want to maintain an active colloquium program, to run a local job fair every semester, and to keep our advisory board at full strength. All these costs are extra to our regular budgets for teaching and administration.

What is more, faculty, staff and students deserve more money than the state provides. The whole IT business is still strong, despite the downturn in the economy and the demise of many dot coms but we often get left out of the picture by the state legislature. However, we are actively exploring

the possibility of getting the formula funding from New Mexico changed to give CS more money. Also we are constantly pushing at the Dean and the administration to raise salaries and make the department more competitive. We are always trying to help our students with more and better scholarships to enable them to finish their degrees and go and get a wonderful job.

You can also play your part by donating as much as you feel you can give to the department. Your donation will be greatly appreciated and we guarantee that it will be used wisely for the well-being of the department. Whether your donation goes to scholarships, or a general departmental fund, or you would like to earmark it for some special project, we will take care of your money. Thank you for your support!

Name: _____ Graduation year (if applicable): _____

Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____ eMail address: _____

Yes, I want to help the Computer Science department at NMSU. Enclosed is my check for:

_____ \$1000 _____ \$500 _____ \$250 _____ \$100 _____ \$50 _____ \$25 _____ \$10 _____ other

I want my gift to benefit:

Richard H. Stark Scholarship _____ Founders' Endowment Fund _____ Brandy Streit Scholarship _____
 Steven Judd Scholarship _____ Patricia D. Lopez Scholarship _____ Harary Endowment _____
 Other - please specify _____

Please make you check payable to the NMSU Foundation and mail it to
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 Department of Computer Science
 PO Box 30001 MSC CS
 Las Cruces, NM 88003-0001

Contacts:

Department

Graduate School

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Graduate student organization:
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