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WELCOME TO A NEW ISSUE OF THE NMSU COMPUTER SCIENCE DEPARTMENTAL NEWSLETTER!

Computer Science
Department receives
Grant

New Additions to
Computer Science

NMSU freshman
creates $10,000
scholarship to fund
undergraduate tuition

Greetings from the Department of Computer Science! As department head, I am excited to have been given the opportunity to serve this great department in my new capacity, and I look forward to sharing this new adventure with colleagues, students, friends and YOU, our alumni, our representatives in the world .The last few months have been exciting and challenging. Throughout the many changes happening at NMSU, our department holds strong and keeps growing. In the last few months we have witnessed outstanding research accomplishments, professional recognition, and a booming 9% increase in enrollment in our CS classes. Our department, too, is going through some profound changes: some new faces are with us, and some old friends have said "goodbye" and moved to their next chapters. I hope you will help us to move forward to our next chapter with your participation, suggestions, and departmental gifts!

GO AGGIES!

Enrico Pontelli
Department Head, Computer Science

New faculty to the Computer Science Department

Yuho Jin

Yuho Jin is a postdoctoral research associate in the Computer Engineering Division of the Ming Hsieh Department of Electrical Engineering at the University of Southern California and an NSF/CRA Computing Innovation Fellow since 2009. He received his PhD degree in Computer Engineering from the Department of Computer Science and Engineering at Texas A&M University. He participated in the PERCS project and carried out interconnect performance modeling at the IBM Austin Research Laboratory in 2007. He received his BS and MS degrees in the Department of Computer Science from KAIST in Korea. His research interests span on-chip networks design, Memory system design, multicore architecture, and performance evaluation.

He is currently working on the development of holistic resource management solutions for improving performance of parallel programs in large-scale multicore systems.

William Yeoh

William Yeoh is currently a post-doctoral research associate in the Department of Computer Science at the University of Massachusetts at Amherst with Shlomo Zilberstein. He received his PhD in Computer Science at the University of Southern California. His research interests include multi-agent systems, distributed constraint optimization, heuristic search and planning with uncertainty. He was awarded an Outstanding Research Assistant Award in 2009 and an Outstanding Teaching Assistant Award in both 2004 and 2007 from the Computer Science Department at the University of Southern California. His paper on distributed constraint optimization was also nominated for the Best Student Paper Award at AAMAS 2009

NMSU freshman creates $10,000 scholarship to fund undergraduate tuition

While most college students and their parents are consumed with finding ways to pay the costs of getting their degree, one New Mexico State University freshman is donating her $10,000 Google scholarship to create a new scholarship for another NMSU student.

After graduating from Las Cruces High School in May 2010, Natasha Nesiba was one of seven to receive the competitive $10,000 Google Anita Borg Memorial Scholarship for First Years to fund her tuition. She also was one of 29 high school graduates selected from around the country to attend the 2010 Google Computer Science Summer Institute, a three-week summer program at the Google headquarters in Mountain View, CA.

"We really got to experience life as a 'Googler,'" Nesiba said.

The students attended panels and presentations, worked on Web applications using Python programming and met with Google employees from various departments. Other Google employees acted as mentors, and helped each student integrate into the Google campus.

However, 18-year-old Nesiba already had received the President's Associates Excellence Scholarship, NMSU's most prestigious award, which covers tuition and fees plus $1,625 each semester. With her tuition already paid, she asked Google if she could donate the money.

"I believe the opportunity to attend college is a privilege," Nesiba said. "To be able give someone that opportunity is so gratifying. There are so many students who can benefit from this scholarship and it's great that I can help."

Nesiba created a new $10,000 scholarship to honor her father. The Mark Nesiba Memorial Scholarship for Women in Computing will fund tuition for an NMSU undergraduate majoring in computer science.

"Tasha is not only an extremely talented and bright student, she is also a wonderful human being, very generous and interested in helping others," said Enrico Pontelli, computer science department head.

Nesiba was recruited as a research assistant for the Young Women in Computing Program, an outreach program of the Computer Science Department, in 2009, while she was still in high school. Pontelli, the program's director, has assisted her throughout the scholarship design process.

"She decided on her own to contact Google and explore the opportunity to use Google funds to help other students in computer science," Pontelli said. "She just wanted to give back to the program and help others succeed in this discipline."

Nesiba has been active in every aspect of creating the scholarship, from planning the creation of the award to setting requirements for the selection of a recipient. She also will serve as a member of the selection committee.

The Mark Nesiba Memorial Scholarship will likely be awarded as early as the fall 2011 semester.

We had 32 applicants for our middle school camp and took 27. For the high school applicants we had 25 applicants. We plan on taking about 14...we haven't' made final decisions yet on campers or camp assistants. All the schedules and information about out our camps are available on www.cs.nmsu.edu/ywic.

Young Women in Computing began in 2006 as a summer camp for local high school females at New Mexico State University, in Las Cruces, New Mexico. Each year, the camp is a five-week program during the second session of summer school at NMSU. The camp is specifically for high school females who have excelled in their academic studies and who have an interest in computing and technology. The students are required to turn in an application packet, which entails of an application, their academic transcript, an essay, and two recommendations from previous teachers. YWIC participants receive a weekly stipend to attend camp, and are provided with their books and other supplies. During the five week session, the students take part in different teambuilding activities that are offered on campus. These include Rockwall climbing, a challenge course, self-defense training, financial aid information, and other similar activities. There are also optional Thursday night activities, with intention of establishing and strengthening comradeships between the staff and camp participants. These events are meant to be fun, with agendas such as movie nights, game nights, mystery solving scavenger hunts, and more. The students are not only required to attend every day of the five week camp, but they are also required to attend monthly seminars. At the seminars, prominent women in technological professions are brought as guest speakers to give the students a presentation on their research, as well as a synopsis of how they got where they are now.

The Young Women in computing program will host its annual high school and middle school summer camps in 2011. These programs are for students in the Las Cruces Public School District and the Gadsden Independent School District.

The five-week high school camp is specifically for females who have excelled in their academic studies and have a high aptitude for math and science. YWiC participants receive a weekly stipend to attend camp, and are provided with their books and other supplies. Camp curriculum includes: Learning to Program with Alice (for which they earn college credit), bioinformatics, robotics, LilyPad Arduino (merges programming with crafts), and web design. Students also participate in fun team building activities and gain knowledge about the college experience.

The middle school camp is a one week program that focuses on PicoCricket robotics and Scratch animation. Students are given the opportunity to present their projects to parents and Computer Science faculty at the end of the camp. Similar to the high school program, all books and supplies are provided.

If you would like information about the YWiC summer programs please contact Rachel Jensen or Rebecca Galves at ywic@cs.nmsu.edu or 575-646-4451.

Department receives grant to build public school students' concepts of modern computer science NMSU, Computer Science

Are you intimidated by computers? Does the concept of incorporating computer science into your daily life cause you to break out in a cold sweat?

Researchers at New Mexico State University are determined to help people become more comfortable with the concepts of computing and programming – and they are starting in the public schools.

At a Research Rally Feb. 25 at the Las Cruces campus, NMSU faculty and staff celebrated a $2.4 million grant – GK-12 DISSECT (DIScover SciEnce through Computational Thinking) – from the National Science Foundation that will allow researchers to address the problem of promoting preparation in the field of computing for students and instructors in middle and high schools.

Enrico Pontelli, the principal investigator of the project, said computational science and computational thinking is at the core of almost every science-related field.

"Even though the scientific world has changed in this direction, the educational world has not embraced this," Pontelli said.

Through this project, NMSU graduate students visit middle and high school classrooms in the Las Cruces Public School and Gadsden Independent School districts to assist and train teachers in making innovative use of computational tools in the teaching of traditional Science, Technology, Engineering and Mathematics (STEM) courses.

For its first year, the project has four fellowship students and four public school teachers.

"They are working as a team," Pontelli said. "The teachers are training the fellows to operate in the classroom. The fellows are training the teachers to become competent in computational methods. Together they are working in developing these new models."

Pontelli, who is a professor and serves as the department head of computer science, said he is very hopeful that this project will expand over time to include more students and more teachers. He said he expects to increase the number of participants to 10 fellows and 10 teachers in the coming years. The DISSECT grant is for five years.

Barbara Couture, president of NMSU, said she frequently talks with state legislators about what NMSU is doing to help improve public schools and the educational experience of students so they can be competitive in the global economy.

"We know that science and technology, and engineering and math are the areas where America needs to begin to step up its efforts promptly in order to be competitive on the global scale," she said. "I am very proud to say that New Mexico State University has taken a great leadership role there."

DISSECT builds on the expertise in computing and outreach provided by the Computer Science Department, including Jonathan Cook, with the Department of Computer Science; and Susan Brown, director of the STEM Outreach Office in the College of Education, as well as other staff in the outreach office. It is a collaboration among several researchers in the computer science, education, mathematical sciences and biology departments at NMSU, and instructors and administrators at the area school district.

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- RICHARD H. STARK SCHOLARSHIP
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Please consider requesting the next issue of the newsletter to be sent electronically to your email. To request this send an email to: epontell@cs.nmsu.edu

WOULD YOU LIKE TO GIVE BACK TO OUR DEPARTMENT?

There are many different ways to give back to the department. The simplest way is to make a donation. Your donation will support the students pursuing their educational dreams, through scholarships, renovation of equipment and acquisition of materials and supplies. In particular, we are launching a new campaign at creating new opportunities to help young women interested in pursuing studies in Computer Science. Your donation is tax deductible and even a small contribution will make a big difference!

Please join our Facebook page and help us develop a community of NMSU CS Alumni. If you are in the neighborhood come by and visit! Or simply send us your ideas: your experience is valuable to assist with development to help our students connect with alumni and potential employers, and to grow into a bigger and stronger department. You may contact department head Enrico Pontelli (epontell@cs.nmsu.edu) or Elaine Stachera (elainek@nmsu.edu) in development and philanthropic gifts or you have any questions or suggestions.

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