The Tenth International Conference on Applications of Computer Algebra (ACA) was a major annual meeting dedicated to reporting serious applications of computer algebra theories and tools for computer science, mathematics, science, engineering and education. ACA - 2004, sponsored by the National Science Foundation (NSF), was held at Lamar University. It was organized by Dr. Quoc-Nam Tran, Associate Professor of Computer Science department at Lamar. This international conference was held from July 21 to 23, 2004 at the Hilton Hotel in Beaumont, Texas.

There has been a dramatic increase in the use of symbolic computation in engineering, and scientific applications. The goal of this conference was to emphasize the applications of symbolic computation and promote interaction between symbolic computation researchers and users from other disciplines. The Tenth ACA Conference consisted of eleven sessions organized by prominent researchers from all over the world who focused on their application areas including computer aided geometric design, geometric modeling and computation, high energy physics, economics and finance.

(continued on page 2)

“Real-Politik of Doing Business Abroad Post 9/11 and the Iraq War” was presented by Mr. Ray Miles on November 9, 2004 in the Galloway building. He is president of Rajko Associates, a consulting firm dealing in international business and politics. In this presentation he explained how 9/11 and the Iraq War has affected international business and society. He discussed how changes in money flow in business can affect normal human life. He also spoke about how to overcome problems which are created after war. He said, “The first thing to do is to know your self. Be patriotic, realistic and know both sides. Everyone

Attendees of ACA-2004

Mr. Ray Miles at Lamar University
There were sixty-five (65) paper submissions to the conference. All papers submitted for consideration were evaluated by members of the programming committee, external reviewers, or both. Thirteen papers (13) were selected for presentation.

The ACA conference series has made a broad impact on both the symbolic computation research community and the user community. Through the annual meetings, where research results are first communicated, the user community will be able to learn about the state of the art theories and algorithms that are available. The research community is able to learn about important problems and challenges facing serious users from other disciplines, inspiring fresh new theoretical research and algorithm design.

**Diwali Celebration in Setzer Student Center**

Diwali: Time to rejoice and enjoy. The word "Diwali" means a row of lights and is very enthusiastically celebrated for five continuous days and each day has its significance with a number of myths, legends and beliefs.

Among all the festivals celebrated in India, Diwali is by far the most glamorous and important. Enthusiastically enjoyed by people of every religion, its magical and radiant touch creates an atmosphere of joy and festivity. Diwali celebrations in India are similar to Christmas celebrations in the USA. All the people exchange sweets, wear new clothes and buy jewelry at this festive time. As a festival of light and beauty it encourages artistic expressions through home decorations, stage-plays, elocution competitions, singing and dancing programs, making gift items and making delectable sweets thereby discovering new talents of younger people. As a result innumerable communities with varying cultures and customs mingle together to make Diwali celebrations a very happy occasion for all.

Diwali leads us into truth and light. It symbolizes the age-old culture of India which teaches us to vanquish ignorance and to drive away darkness that engulfs the light of knowledge. Diwali, the festival of lights, even today in this modern world projects the rich and glorious past of India and teaches us to uphold the true values of life. During Diwali, people worship God Ganesha and Goddess Lakshmi to achieve the blessings of wealth and prosperity.

Every year at Lamar University, a Diwali function is organized by Friends of India Association. This year it was held in the Setzer Student Center Ballroom on 14th November. The ballroom was illuminated with candles and strands of white lights. Many students, staff and guests attended the function to celebrate Diwali together. The crowd was treated with group dances, Indian songs and periodic door prizes until it was time for dinner, when everyone headed for the food. The Indian food served was catered by a restaurant from Houston. After dinner everyone gathered outside the Setzer Student Center and enjoyed a fabulous fireworks display. Many of those who attended Diwali function...
GRADUATE STUDENTS OF FALL-2004

In Fall 2004, the Computer Science department had a record number of M.S. graduates. Thirty-nine graduate students from Computer Science received their degrees at commencement on December 18th 2004 in the Montagne Center.

Here are the comments from some of the graduates:

Shreedeep Mitra

My experience in the Computer Science department has been both enriching personally and professionally. The department gave me the opportunity to tap my potential and use it to solve practical problems during my MS program. The Competitive Scholarship offered by the department was a great help to me. When I joined the MS program, my programming skills were not so good. Some of the basic course gave me a last chance to hone my programming skills. I would like to make a special mention of Dr. Osborne, whose courses were overloaded with assignments and projects. But in the end, I was able to learn more technologies than in any other course. And I consider myself to be fortunate to take his courses, which provided me an in-depth practical look at operating systems, networks, distributed services and WiFi technologies. I was able to grow professionally by working as a system administrator in the department. This invaluable opportunity exposed me to installation and management of NIS, NFS, DNS, Web, Application, Samba and Mail servers on SunSPARC-Solaris, Redhat-Linux and Microsoft-Windows platforms. Working as part of a team and solving problems was an educating and fun (continued on page 5)

EXXON MOBIL EXECUTIVE IN RESIDENCE PROGRAM

Ray Miles’ visit was made possible by a generous grant from Exxon Mobil.
NEW FACULTY MEMBERS

Dr. Bo Sun

Dr. Bo Sun joined the Department of Computer Science as an Assistant Professor in the Fall of 2004 and is currently teaching Computer Networks and UNIX/C++. He received his Bachelor's degree in Computer Communications from Nanjing University of Posts & Telecommunications, Nanjing, Jiangsu, P.R. China, in 1996. He graduated with a Master's degree from National Laboratory of Switching Technology & Telecommunications Networks at Beijing University of Posts & Telecommunications, Beijing, P.R. China, in 1999. After that Dr. Sun joined the Department of Computer Science at Texas A&M University, College Station, TX to pursue his doctoral (Ph.D.) studies in the field of intrusion detection. As a Graduate Assistant, he worked on various research projects in the areas of wireless and wired networks. His research interests include computer networks and wireless networks, primarily focusing on intrusion detection of mobile ad hoc networks, sensor networks and cellular mobile networks.


In his leisure time he enjoys playing basketball, tennis and ping-pong. He enjoys working with students and wants each student to work hard. Dr. Sun's goal in life is to establish himself as a well respected teacher and researcher in his field by doing his best every day. He got married last May. His wife received her Master's degree in China from a medical university. After that she did two years of research in University of Pennsylvania and then in Texas A&M College Station.

He is enthusiastic about his research activities. Also it is exciting for students to know that he is interested in promoting research activities among undergraduates and graduate students who are concentrating in the areas of Wireless Ad Hoc Networks, Sensor Networks Network Security (Intrusion Detection in particular), Wireless Ad Hoc Network Security, Sensor Network Security, Wireless LAN Security.

It is indeed an honor to have Dr. Bo Sun as a faculty member in the Department of Computer Science, Lamar University.

Dr. Jiangjiang Liu

Dr. Jiangjiang (Jane) Liu joined the Department of Computer Science as an Assistant Professor in the Fall of 2004 and is currently teaching Computer Architecture and Multimedia. She received her Bachelor’s degree in Computer Engineering from the Beijing University of Posts & Telecommunications, Beijing, P.R. China, in 1997. She did her M.S. and then a Ph.D. degree in Computer Science and Engineering, from the University at Buffalo, The State University of New York in the field of computer system design.

Her research on computer architecture mainly focus on: high-performance, low-power, and cost-effective design for superscalar, SMT, embedded systems, and SoC; value-based design and optimization of memory systems; and data mining for computer architecture.

Dr Jane Liu is a member of IEEE, ACM, WIE, SIGARCH, CRA-W and has also served on the Review panel for International Conference on Computer Design (ICCD 2003), San Jose, CA, 2003.

She does aerobics and swimming apart from her work. She loves to teach and do research. According to her, working as a professor provides a lot of flexibility because you can do research in your field of interest, whereas, while working in industry you have to do research on only what the company is concerned with.

Her goal in life is to be the best at what she does. She is interested in promoting research activities among students who are concentrating in the areas of cost-effective design of computer systems and data mining. Her role model is Madam Marie Curie, an excellent researcher, who devoted all her time and energy for the cause of research which is recognized as a landmark in science.

It is a pleasure to have Dr. Jiangjiang Liu as a faculty member in the Department of Computer Science, Lamar University.
INTERNATIONAL DAY

It has been the tradition of the Department of Computer Science to organize an International Day every year. This year it was held on 1st October 2004 in Maes building across from the department office. It was a great opportunity for the international community to get together and to have more of a casual and non-academic interaction with each other. Americans and citizens of many countries learned more about each other’s cultures over a multiethnic lunch. The cuisine contained delicious dishes from many areas of China and India, and from the countries of Latin America, Turkey, Thailand, and of course, the US. This tradition is one way to promote cross-cultural understanding. We look forward to many more such events in the future.

GRADUATE STUDENTS OF FALL-2004

experience. The hard work and long nights spent in the labs made me competitive and provided a strong foundation for the 24/7 work culture often expected in the IT industry. My future plan is to work either as a system/network engineer or programmer/analyst. I see myself in a leading position in a couple of years in my areas of expertise in the IT industry.

Stanley George

The Computer Science department gave me a lot of practical programming experience. I learned to handle deadlines, maintain the quality of work and perform consistently. Here I have strengthened my patience, hard work and ethics. The professors tried to bring out the best in me. They kept me alert and made me learn to face the challenges. They were helpful and so my doubts were cleared. I would like to tell the current students to remember the academic and personal lessons that they learn here. My sincere advice to the current students is to maintain consistency and be successful in the future. I have plans to be a Team Leader, Project Leader and Project Manager and eventually give independent consulting solutions to firms.

Tejaswini Pardeshi

At Lamar University, the first thing I liked is that they see to it that we know everything practically. There are so many assignments involved for every subject. Because of that, my programming skills really improved. All the professors see to it that there should be some programming assignment involved in it, even though the subject is theoretical. Especially in Dr. Osborne’s classes we had so many assignments. Initially, we used to feel that there would be a lot of burden in doing those assignments but we really learned a lot by the end of the semester. I would like to tell the current students who are about to graduate that they should do their assignments on their own and don’t get it from the internet. These assignments are given by professors to help you to learn something. Don’t think that the professors just want to overburden you with the assignments.

About the professors, I want to tell that they all are nice and knowledgeable. I learned the way they taught the subjects and arranged the （continued on page 7）
Our CS Women++ program, now in its third year, continues to be a great support system for our female students. Some very exciting things have happened in 2004 in our mentoring and research programs. We owe thanks to many people for helping make this program a success.

**Mentoring program expanded**

We were very fortunate to have the help of two dynamic women in coordinating our mentoring program, Linda Koetter and Thelma Myers. Linda Koetter, a Lamar graduate and Director of Lamar’s Central Computing, volunteered to coordinate the women’s mentoring program this year. Some of you may remember Linda from her days as President of the Lamar University Student Chapter of the Association of Computing Machinery (“ACM”). She remains a very energetic and positive force and has been a great asset to the CS Women’s mentoring program. Thelma Myers, who has been a member of the CS Advisory Board for many years, volunteered to serve as Advisory Board liaison to the mentoring program. With Thelma’s help we have added some members of our Advisory Board to our roster of mentors and have begun expanding the program to include male students and mentors as well as females. Thank you, Linda and Thelma, and thank you, Advisory Board members for being mentors to our students!

A highlight of November, 2004 was a panel discussion on careers in computing that was cosponsored by the Association for Women in Computing – Houston. Alumna PeenPeen Chiou of Lamar University – Orange, joined Dylan Gray, EVP of ICSP, Houston; Jennifer Flynn of Tek Systems, Houston, and Elizabeth of UT Health Science Center Houston in the panel discussion with our students. Thank you, panelists, and thanks to Kristin Knudsen, Community Affairs Co-Chair of AWC-Houston for your help in organizing the panel!

Other highlights include a Pass the Torch party honoring graduating seniors Tonya Smith, Christel Padlan, and Mauli Jhaveri, and a tour of the Shell Oil/Motiva Refinery hosted by Lamar graduate- Staci Lisenby and Mary Jones, two of our most active mentors. Thank you, Staci, Mary, and Shell/Motiva for your support of our students!

**Exxon Mobil funds Women in Research Development Research program**

Supported by a $10,000 grant from Exxon Mobil, our women’s research program continues to excel. The 2004 team designed a hybrid deliberative/reactive mobile robot that could navigate in its environment, detecting and avoiding any obstacles that it may encounter, without human intervention. Their research stemmed from her thesis, Ling designed a prototype communication language for autonomous robots. Her research stemmed from her experience with WIRED.

**Texas Workforce Development Fund Grant provides continued support of the CS Women’s program**

In 2004, we received an additional funding of $35,000 from this grant. We plan to use these funds to continue the CS Women’s program and to begin outreach to middle school and high school girls. Through the outreach program we hope to create a spark that will fire the imaginations of young girls and eventually bring them to join our family of CS Women.

**For More Information**

If you would like to participate in the LU CS Women’s program, to make a donation to the program or to get more information, please contact:

Professor Peggy Israel Doerschuk
Founder of the LU CS Women’s Program
Lamar University Computer Science Department
P. O. Box 10056
Beaumont, TX 77710
email israel@sal.lamar.edu
(409)880-8782

We need your help. As a graduate of Lamar’s Computer Science department, you can be a great inspiration to our students. You can help by being a mentor to a student, serving as a guest speaker or panelist, hosting a field trip to your company, or helping with our outreach programs.
course work and assignments.

The tuition waiver and scholarship which was offered to me before coming here helped me a lot financially and there is a good environment and cooperativeness among students. Even the professors are very cooperative and even after their office hours they used to sit with us and clear our doubts. It really helped me in completing my MS.

I worked as a grader of database management system in C.S department. It was a nice experience. When you evaluate students, you too should know lot of things as the students will be asking you a lot of questions.

My future plan is to work as a software engineer. I’ll relocate from here because I found that there are lot of opportunities in north of USA. I am planning to go to Illinois or Chicago. I will be working as software engineer in database field.

**Divya Anantharaman**

Studying at Lamar was different and enjoyable. Its course work is pretty good and the Computer Science department is the best in Lamar. I feel professors like Dr. Osborne, Dr. Tran, Dr. Koh and Dr. Doershuck have dedicated themselves entirely to educating us, this is something everybody has to realize and take full advantage. The good thing about the Computer Science department is that there is really a dedicated faculty who are ready to help you with anything provided we show enough interest. To the current students I would like to say that the students should not get discouraged because Lamar is a small University. It has a lot of potential. It is up to them to utilize the available opportunity well. The job market is good right now, so the students should graduate soon and try to get a job. A little negligence can delay their graduation.

I am looking for a job right now. I will work for a few years and then try for a PhD.