CSAN

Is the biannual Alumni Newsletter of the Computer Science Department at Texas Tech University. Please direct comments about this issue to:

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Faculty Feature:  Per Andersen

Dr. Per Andersen spent five years as a staff member for the Computer Science Department, and completed his PhD during that time. He joined us in the Fall of 2003 as an Assistant Professor. Before that he worked as a Unix Administrator for the TTU campus systems after moving here from Canada.

What was it like going from a staff position with CS to a faculty one? It wasn’t too difficult, a few people asked me to help them with stuff I used to do as a staff member but they soon overcame that habit.

What kind of research are you doing these days? And who are you working with?
I’m working on GRID technologies and human computer interaction. I have grants with the school of medicine and HRSA. I have active collaborations with CS, Mass Communication, Electrical Engineering, TTU School of Medicine and School of Nursing faculty.

When did you discover your interest in Computer Science?
I slowly had to use more computing in my job as an electrical engineer. Over a period of 5 years - starting in 1981- I went from hard wired automatic control systems based on discrete components and chip technologies to automatic computer control.

Since you worked in industry for many years before going back to school - how has it affected your perception of Computer Science as a whole? I probably tend to focus more on the expectations industry has of my undergraduate students. I’m very much applications driven although I do understand the importance of theoretical work. I see Computer Science as a discipline that supports all other science and engineering disciplines in a way no other discipline can.

And finally - if you could be any computer language in the world - which one would YOU be? C - because it’s universal. It handles almost any problem I encounter, whether it’s high level coding, or low level. It could do anything.

Faculty Bytes

Dr. Mike Sobolewski, Professor, received an award for Outstanding Service as the Program Chair for the 11th International Conference on Concurrent Engineering - Research and Applications, held in Beijing, China, last July. He was also invited by Sam-

(cont. on pg 5)

Former Alumni, Lecturer, Stays Busy

Dr. Ben A. Calloni (MS 94, Ph.D. 97 and former Lecturer), now of Lockheed Martin Aeronautics Company's ADP (formerly Skunkworks) division in Fort Worth is a Program Manager / Principle Investigator on several R&D activities. His most current research is in collaboration with the Air Force Research Lab, the National Security Agency, and several DoD agencies and weapon programs working to certify commercial software technologies for use in DoD and eGov systems that have an Information Assurance or Multi Level Security requirement. If successful, the usage of these certified COTS solutions could result in savings to DoD programs on these sub components of well over 80%. In addition these products could be utilized by Homeland Security and other commercial companies to better secure our nation’s computer systems from cyber-terrorism.

In addition, Dr. Calloni serves as the LM Corporate Representative to the Object Management Group (OMG), The Open Group (TOG) and to the American Institute of Aeronautics (cont. on pg 4)
GRADUATE RECOGNITION

The following students were the recipients of scholarships for the 2004-2005 academic year. Congratulations to our outstanding graduate students.

Thimmaya Ame
Matthew Berwald
Saurabh Bhatla
Jarred Blount
Justin Blount
Marta Calderon Campos
Naveen Chikoti
Sandep Chinthabithina
Sreeharsha Dasari
Soma Datta
Swetha Dorbala
Zhipeng Gong
Karan Gupta
Hamideh Hassouneh
Yaoqing Jing
Vivek Khurana
Aniruddha Kulkarni
Yin Lu
Ameyaprakash Malvankar
Veena Mellarkod

Ricardo Morales
Rajkumar Murthy
Ruihua Niu
Ravi Shanker Reddy Patel
Sophia Penumaka
Mario Pitalua
Murali Raghavan
Abhijit Rai
Nitin Rammannavar
Moshin Shaikh
Rattasak Srisrunoongruang
Santhosh Swaminathan
Dwayne Towell
Adam Turner
Sreeram Vaidyanath
Shiva-Sai Vaidyanathan
Srikant Vallabhaneni
Fajin Wang
Yan Xu
Weijun Zhu

Thank You !!

We’d like to extend our thanks to all the alumni, corporations, and friends that have contributed to the Computer Science Department in the year. All of you make a huge difference in what we’re able to accomplish!

$1000 & up
ExxonMobile Corporation
Gary Wood

$100 – 999
David Butsch
Nicholas Cobb
Lindsey Cook
Greg & Tammy Dore
Randy Friemel
Billy & Joy Huber
Micah Matteson
John Mihm
Dr. Elizabeth Morris
Anil Rao
James Ries
David Seese
James B Veasaw

$20—99
Dr. James Archer
Greg Buxkemper
Kevin Carlson
John Chandler
Bobby & Gwynna Cude
Dean Fontenot
Amy Fox
Don Hackler
Belinda Lai
Kim-you Mau
Scott Monroe
John Morton
Satish Narayan
Walter Peterson
William Prusha
John & Kristi Reed
John Smith
David Stevens
Edmond Tam
David Tannen

Undergraduate Scholarship Awards

The following undergrads were selected to receive scholarships for the 2005—2006 Academic year.

Alumni - Sachin Thakur
ExxonMobile - Charles Dubose
Terry G Myers – Garrett Richards
Omsulski - Garrett Richards
Outreach - Darcy Cleaver
Phillips - Michael Meseke
Raytheon - Cody Adams
Ruwaldt - Victoria Melchor
SPACE - Khanh Le

Congrats to these standout students!

Calloni, cont.

and Astronautics Computer Systems Technical Committee. The OMG and TOG are international software standards consortiums developing standards that allow diverse computer systems to interoperate around the world or on the same platform. Last year he was elected to serve on the Board of Directors of both the OMG and TOG. He was the first OMG Board member from DoD and is the only individual to ever serve concurrently on these two standards bodies. Dr. Calloni also chairs the Real Time and Embedded Task Force of the OMG working to develop and adopt CORBA, DDS, UML, and MDA standards for the RTES community. All this activity has kept Ben on the road extensively to such hardship locations as LA, Washington DC, Tampa, Boston, Paris, London, Brussels, Athens, Tokyo, Dublin… well you get the picture. Hey, it’s a tough life but somebody has to do it.
Past and present space missions were more predictable than the ones currently being planned to go to the moon or Mars. Capabilities for these future missions need to be more dynamic and fluid. The missions will require rapid and dependable methods to support significant software modifications to onboard systems. Recent NASA workshops have indicated that current software development practices and computer languages – even with evolutionary changes – may not meet the challenge of future missions.

TTU CS faculty and students are working on NASA-relevant declarative languages to help meet the challenges posed by future long distance and duration missions. These languages enable the rapid development and deployment of dependable onboard and ground-based deliberative and computational systems. Following is an overview of how they are applying their declarative languages for deliberation, numerical computations, and reactive control.

Dr. Michael Gelfond and Dr. Richard Watson, working with the United Space Alliance personnel, are developing systems to support mission control personnel. Using a high level language developed by Dr. Gelfond (A-Prolog), the collaboration is developing systems capable of finding work-arounds in the presence of even multiple failures in the Shuttle’s Reaction Control System. The A-Prolog system finds work-around plans to execute maneuvers in a matter of seconds. A-Prolog can be used in a similar fashion for other types of onboard systems. Due to communication delays, future long distance missions will require onboard deliberative capabilities of the type A-Prolog offers, in order to provide quick response to problems that may occur.

Texas Tech’s SequenceL effort is working with members of Johnson Space Center’s Guidance, Navigation, and Control organization to develop new techniques for developing system requirements. They are currently developing the Shuttle (continued on pg. 5)
Alumni Updates

Srirangam Addepalli (MSCS’03) tells us that he is working with the High Performance Computing Center here at Tech.

Jon Burgin (PhDCS’98) and his wife Amy announced the birth of their son Freedom Hawk Burgin, last May 16th. They are still in the San Antonio area.

Greg Buxkemper (BCS’98) is currently finishing up a MBA at the University of Texas.

Giri Chodisety (MSCS’99) is now working for Dell Computer and living in Plano, TX.

Amar Devegowda (MSCS’01) now works for IBM as a Senior Software Engineer.

Lois Foster (BS’81) is now living in Coppell, TX and still works for American Airlines.

Lori Gibler (BCS’94) resigned from her position of Manager of Computing for the College of Engineering last fall and took a position with the TTU IT Networking division.

Brian Greenwald (BCS’95) is currently a Senior Programmer/Analyst for the City of Plano in the Technology Services area and lives in Garland.

Virginia Hill (BCS’87) writes to tell us that she has moved to Jemez Springs, NM and will be getting married in August.

Jianyong Huang (MSCS’04) tells us that he has moved to Atlanta, GA to work for Video Technics, Inc.

Billy & Joy Huber (BCS’88 & BCS’87) just updated us. Joy is a Software Developer for HealthCare Computer Corp in Fort Worth and Billy is working at the University of North Texas as a PeopleSoft Administrator. They are now living in Keller, TX.

Vivek Jaiswal (MSCS’04) tells us he is working as a Program Analyst for Supreme Soft, Inc and living in Gaithersburg, MD.

Srividya Kona (MSCS’02) and her husband Ajay Bansal (MSCS’02) are living in Plano, TX. Srividya is working for The Software Group.

Patricia Little (’85) retired from Texas Tech University last January.

Elizabeth Morris (PhDCS’04) let us know that she is currently at Raytheon in Garland, Texas. She has been assigned to Systems Engineering in the Intelligence And Information Systems Department.

Satish Narayananmurthy (MSCS’94) is currently working for Cornell University in Ithaca, NY as a PeopleSoft/Oracle Administrator.

Keri Gleason Ostermann (ExStaff) is now working for Macfarlan Real Estate Investment Services in Dallas, TX after getting her degree in MIS from TTU. Keri married Jason Ostermann (BCS’02).

Kris Pazhayanooor (MSCS’04) is now working as a programmer/analyst for Academic Support Services here at TTU (better known as the PASS center). He tells us he’s still on the crusade of enslaving computer kind for human benefit.

Todd Quasny in JSC Mission Control

Todd Quasny (BSMSCS’03) got a job as a flight controller at NASA in Mission Control for the International Space Station! He will at the Johnson Space Center in Houston, TX. The console he will be working at is responsible for Commanding and Data Handling for the station. (see picture above)

Giri Rao (PhDCS’93) writes to tell us that he finally got married last fall. His bride’s name is Rachna.

Selliah Rathnam (MSCS’88) is currently working for Phillips Semiconductors and living in Pleasonton, CA.

Michael Shelton (BCS’99) writes to tell us that he is now working as a Software Engineer II for Northrop Grumman in Harveygate, England! He and his wife Dasa moved to England last year.

Naheesh Srinivasaiah (MSCS’00) is now working for Duke Hospital in Cary, NC.

Stacy Swinburn (BCS’00) will begin her new position as a full time Lecturer of Mathematics at the University of Northern Colorado in Greeley, CO this fall.

Venkata Vemulamanda (MSCS’94) is working for IPC in Dallas, TX and lives in Plano.

Vijay Venkataraman (MSCS’94) is working for INET, Inc. and living in Garland, TX.

Pete Wenzel (MSCS’92) and his wife welcomed the birth of their son Jacob last August 25th.

James Wharton (BCS’89) is still working for DSC Communications and living in Murphy, TX.

Alison Woodruff (BSCS’04) tells us that she is working on her Master’s in BA here at TTU and will graduate in May 2006.

Xinwei Xu (MSCS’00) is working for Dell, Inc. and living with his wife in Round Rock, TX.

Calvin Zant (MSCS’05) writes that he is now working as developer for Smooth Fusion, a local software company here in Lubbock (that was founded and owned by CS Alumni Todd Knowlton!).

As always - send your updates to Mysti at mysti.digby@ttu.edu. We’re always happy to hear from...
Faculty Bytes

(cont. from pg 1)

sung Advanced Institute of Technology (SAIT) to give a seminar on Grid and Service-Oriented Computing: The Intergrid Perspective in Seoul, S. Korea in August of 2004.

Dr. Michael Gelfond, Professor, and his longtime collaborator Vladimir Lifschitz were honored at a meeting in a France with an award for their seminal paper entitled, “The Stable Model Semantics for Logic Programming.” This paper routinely ranks among the top ten most cited papers in all of the computer science literature (i.e., not just in the Logic Programming or Artificial Intelligence literature). The award was given by the Association for Logic Programming and is entitled “The Most Influential Paper in 20 Years Award.” Dr Gelfond is a member of the European Academy of Sciences and a Fellow of the American Association of Artificial Intelligence.

Chris McClimans, Director of Undergraduate Labs, left the CS department last fall to work in industry. He has recently moved to the Dallas, TX area.

Michael Helm, Lecturer, had an article published in SERVO Magazine recently. His article, “Converting Low-Cost RC Cars Into Simple Autonomous Robots,” was in the June 2005 issue. Mr. Helm has been teaching our Digital Logic class.

Ian Scott-Fleming, Lecturer, received the Professing Excellence Award from the TTU Success Center. Based on student nominations, individuals receiving this award have distinguished themselves among their colleagues in being proponents of student success.

Dr. Larry Pyeatt and Dr. Richard Watson were both granted tenure and promoted to the rank of Associate Professor as of the Fall 2005 semester.

Dr. Pyeatt continues on a faculty development leave pursuing research with Dr. Donald Wunch at the University of Missouri - Rolla. He began his development leave at the beginning of the Spring 2005 semester and will return for Spring 2006. While in Rolla, Dr. Pyeatt has been working on developing routing strategies for Disruption Tolerant Networks for BBN Technologies and in the area of smart sensing technology and sensor fusion with Sandia National Laboratories.

Abilene Center Update

The CS program at Texas Tech at Abilene received five new international students in the fall of 2005. Some of the students will receive assistantships partially funded by a research grant from the Shelton Foundation of Abilene. Dr. Rattikorn Hewett will direct these students in ongoing data mining research. The new students are from Thailand, Romania, Mexico, China and Turkey.

Stephen Conley graduated in May 2005 with a Master of Software Engineering degree. Research Associate, Todd Quasny, has taken a job with NASA mission control. Research Assistant, Robby Watson, has taken up Todd’s AI robotic work. Dr. Remzi Seker left TTU at Abilene to join the faculty of the University of Arkansas at Little Rock.

Dr. Jack Barnes is in the process of “canning” CS-5303, the last of three leveling courses for non-CS students entering graduate studies. The series is being converted into an online format where the video lectures and supporting course material can be used over again each semester. CS-5301 and CS-5302 have been completed by more than 20 online students in the past year through the efforts of Dr. Barnes and Teaching Assistant Paul Beckling.

On a sad note - we recently learned that one of the first 4 graduates from the Abilene site, Chris Kuberg, passed away on August 7, 2005. In lieu of flowers, memorials may be made to Chris Kuberg Memorial Fund at Citizens Bank, Russellville, Alabama.

NASA Research

(cont. from pg 3)

Abort Flight Management requirements in SequenceL, (a declarative language developed by Dr. Cooke) to demonstrate their behaviors in the Shuttle Engineering Simulation. The successful execution of the SequenceL requirements will serve as a preliminary proof of concept to demonstrate that GN&C may not need to develop costly prototypes to validate the requirements of their future systems.

The CSM effort has resulted in a language, developed by Dr. Nelson Rushton, to tie together the deliberative power of A-Prolog, the computational power of SequenceL, and existing onboard systems. The success of this effort will result in a more general, integrated, and formal approach for the implementation of controls architectures for different types of systems.

In future years TTU faculty working with NASA and United Space Alliance will be hardening these capabilities so that they can be used for the rapid and reliable development and modification of onboard systems between and even during missions.

New Ph.D. Graduates

Congratulations to the latest graduates of the Computer Science Doctoral program. The following students have received their Ph.D. from Texas Tech University over the last year:

Chengcheng Li
Changming Ma
Elizabeth Powell Morris
Curtis Welborn

Dr. Morris graduated in 2004, Dr. Li received his degree in August 2005, and both Ma and Curtis defended this month and will receive their degrees in December. Congrats to all our new Drs!
**Missing Persons**

We've found a few, but these are still missing! If you know where to find anyone on this list, please let us know! We'd hate for anyone to miss getting his or her newsletter!

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