

CONNECTED

Spring 2011

— Inside this Issue —

Gordons Establish Scholarships

Remembering Dr. Robert Funderlic

Artificial Intelligence in the Classroom

Predicting the Effects of Climate Change

New Future Students Campaign

Check out NC State's Computer Science Department at

www.csc.ncsu.edu

and



Keith and Margie Collins Make Transformational Gift Plans

Gift plans include a professorship and multiple endowments valued in excess of \$2.5M

Computer Science alumnus **Keith Collins** (B.S. '82), and his wife **Margaret** (B.S. Horticulture '79) have finalized gift plans with an estimated value in excess of \$2.5 million that will benefit faculty and students in both the College of Engineering and the College of Agricultural and Life Sciences.

When fully in place, the gift plans will create several named endowments to benefit the NC State Department of Computer Science, including the:

- **Collins Distinguished Professorship in Computer Science**, intended to help the computer science department attract top talent to study ways to use data management and high-performance computing in development of large-scale business analytic solutions;
- **Collins Leadership and Computational Excellence Scholarship in Computer Science**, to be awarded to top students who have demonstrated strong aptitude and interest in research and mathematics; and
- **Collins Computer Science Discretionary Fund**, an endowment which will provide the department additional resources to recruit students and faculty, provide support for student organizations, support lecture series and make faculty awards, among other initiatives.

In addition, the Collins' gift plans will establish the **Margaret "Margie" P. Collins Fund** for the College of Agricultural and Life Sciences, which will provide funds to support the JC Raulston Arboretum, the CALS Ambassador program, and CALS student scholarships.

The gifts represent the largest planned gifts ever documented from an NC State computer science alumnus.

If you'd like to know how to include NC State and the Computer Science Department in your estate plans, contact Ken Tate (tate@csc.ncsu.edu), Director of Development and External Relations.



From the Department Head

Dr. Mladen Vouk



Welcome to the Spring 2011 issue of the Computer Science Department's *Connected* alumni newsletter, a report of the happenings in our department.

Since our last issue in the spring 2009, we have continued to experience exciting growth, we have received numerous accolades and professional recognitions, and we have welcomed several new faculty and staff. Our enrollments continue to increase, as does our research productivity and funding, and we are particularly grateful for the generous financial support from our alumni, friends and corporate partners. Following are some of the highlights from the most recent happenings in our department:

UNDERGRADUATE PROGRAM:

- In 2009-2010, we awarded 102 BS degrees, including the first in our new Game Development concentration. In the fall of 2010 we had 629 undergraduate students.
- Demand for our undergraduates continues to be very strong. Their average starting salary increased to over \$58,000. The employers who hired the largest number of our undergraduates over the last year included Fidelity Investments, IBM, NetApp, Cisco and SAS Institute.
- The department has hired two lecturers (Ms. Suzanne Balik, and Ms. ToniAnn Marini) to provide coverage of our lower division undergraduate courses, and an Assistant Teaching Professor (Dr. Sarah Heckman).
- Our program successfully went through ABET-CAC accreditation review.
- Our undergraduates and faculty received a number of accolades: senior Brittany Strachan was selected to the 2009-2010 ACC Women's Basketball All-Academic Team, and Ms. Margaret Heil, associate director for the Computer Science Senior Design Center, has been named an NC State Outstanding Teacher for 2009-2010.

GRADUATE PROGRAM:

- We are pleased to announce that Dr. Douglas Reeves has been named the Director of Graduate Programs. Reeves replaces Dr. David Thuente who stepped down to return to teaching and research.
- Our graduate program continues to thrive! Applications for admission to the graduate program are up 18%, and

applications for the PhD program alone were up 25% over fall 2009. In fall 2010 we had 533 graduate students in the program, of which 168 are PhD students. In 2009-2010, we awarded 126 masters (25 with thesis), and 26 PhD degrees, a rate in line with that in the top 30 computer science departments in the nation.

- The department has hired two assistant professors, Dr. Emerson Murphy-Hill (software engineering) and Dr. David Roberts (serious games).

RESEARCH:

- Our research productivity continues to grow with annual research expenditures in the range of \$9 to \$10 million. We now have an all time high of almost \$37 million in active research grants, which ranks us well within the top 20 for sponsored research funding among computer science departments in colleges of engineering.
- Our research faculty have received numerous accolades: Dr. Harry Perros has become an IEEE Fellow, and Drs. Xuxian Jiang and Tao Xie have received NSF CAREER awards. One of our research and development projects that has grown into a production cloud computing solution for NC State has been recognized by The Computerworld Honors Program as a 2009 Laureate for Cloud Computing Services.

ADVANCEMENT:

- Computer Science alumnus Keith Collins (B.S. '82) and his wife Margaret (B.S. Horticulture '79) have recently finalized gift plans with an estimated value in excess of \$2.5 million that will benefit both the College of Engineering and the College of Agriculture and Life Sciences. These gifts represent the largest planned gifts ever documented from an NC State computer science alumnus.
- Computer Science alumna Suzanne Gordon (B.S. CSC '75, M.S. CSC '80) and her husband Ralph (B.S. CE '72) have recently made a multi-year pledge to establish the Gordon Family Scholarship Endowment, which will provide an annual award to an outstanding undergraduate pursuing a degree in computer science. A similar endowment has been created by the Gordons to benefit undergraduates pursuing a degree in the College of Physical and Mathematical Sciences.

We now have over 6,200 alumni spread all over the nation and in over 20 countries around the globe, and we do our best to stay in touch with all of you. In addition to our *Connected* newsletter, we have a monthly eNewsletter, and a departmental presence on Facebook, LinkedIn, Twitter, YouTube and iTunesU. Please help us stay connected by updating your contact information at www.csc.ncsu.edu/alumni.

Department Welcomes Two Alumni to Strategic Advisory Board

Dr. Mladen Vouk, head of the NC State Department of Computer Science, is pleased to announce the addition of two new members to the department's Strategic Advisory Board (SAB) in 2011:

- **Loren Harrell** (B.S. CSC '72) CEO & Founder, MemberHub.com
- **Heather Miller** (B.S. CSC '93) Senior VP/Business Executive - Technology, Bank of America

The SAB is a cornerstone of the computer science department's strategic planning efforts. This dynamic group of industry executives and academic leaders provide input and guidance, which is critical to helping shape the department's strategic focus.

The SAB meets each spring on campus and functions as a virtual working team throughout the year through conference calls and member involvement on subcommittees, executive panels, and other engagement opportunities.

Membership terms are for three years and may be renewed for a second term.

In addition to providing guidance and direction to the department chair and faculty, the SAB has taken an active role in addressing some of the department's key challenges such as the launch of the **Diversity in Computer Science Endowment**, created to help improve the attraction and retention rates of females and minorities in the field of computer science. In addition to providing the funds necessary to establish the endowment, the SAB provides guidance each year on how the proceeds might best be put to use by the department.

The SAB is currently chaired by **Eric Wagner**, Sr. Director, NAS Solutions for EMC. **Donald Thompson**, CEO & President of I-Cubed, is the current vice-chairperson.

Gordons Establish Scholarship with a Service Twist



Computer Science alumna **Suzanne Gordon** (B.S. CSC '75, M.S. CSC '80) and her husband, **Ralph** (B.S. CE '72), have recently made a multi-year pledge to establish the **Gordon Family Scholarship Endowment**, which will provide an annual award to an outstanding undergraduate pursuing a degree in computer science. A similar endowment has been created by the Gordons to benefit undergraduates pursuing a degree in the College of PAMS.

The two endowments will have a combined starting value of \$50,000, and when fully funded should generate \$1,000 each annually for awards. In the interim, as the endowments are maturing, the Gordons have made a commitment to fund annual awards allowing the first scholarships to be awarded in the fall of 2010.

In the spirit of "paying-it-forward," both scholarship awards will require that recipients volunteer one hour per week as a tutor in math or computer skills at the SAS Learning Center at Kentwood, a partnership program of Communities in Schools, or a similar community program for at-risk children and youth.

"We have been so blessed and are happy to be able to help outstanding students pursue degrees that will allow them to make a very real and powerful impact in the world," says Suzanne. As for the unique service twist, she contends it is never too soon to start giving back.

"Young at-risk children and youth need strong motivators and role models, and who better to provide this vital service than talented NC State students? I'm confident that both the children and the student tutors will grow from the experience, and in the end, that may be the greatest gift we can give."

Suzanne is the Vice President, Information Technology and Chief Information Officer at SAS Institute, where she has worked since 1980. As a graduate of NC State University with bachelor's degrees in math and computer science and a master's degree in statistics, Suzanne maintains close ties to the university. Currently a member of the College of Engineering Foundation Board, she has also served on the Alumni Association Board, the College

of Management Advisory Board, and the University's Board of Trustees. A frequent speaker and mentor to women pursuing technical careers, Suzanne is also active in a medical ministry that provides services to low-income individuals.

"Young at-risk children and youth need strong motivators and role models, and who better to provide this vital service than talented NC State students?"

Ralph is the retired president of TGS Engineers. He is also an NC State alum with a bachelor's and master's degree in civil engineering. The couple has two children with ties to NC State. Daughter, **Emily**, recently graduated from NC State with a bachelor's degree in applied mathematics and a master's in global innovation management, while their son, **Stuart**, is a Caldwell Scholar studying mathematics education.



Remembering Dr. Robert E. Funderlic (1937-2009)

Dr. Robert E. Funderlic, former Department Head from 1986 to 1992, and Professor Emeritus for the NC State University Computer Science Department, lost a long and courageous fight with cancer on September 5, 2009.

Under the leadership of Dr. Funderlic, the Computer Science Department went through some major changes in the late 1980's including improvements in facilities and equipment. Additionally, the department expanded its areas of research specialties and minor fields, including minors in computer science and a graduate minor in artificial intelligence, which at the time was one of the most important trends in the department.

Also under his leadership, Computer Science became a department within the College of Engineering, and a PhD program was established. The independent PhD program placed

NC State on solid footing in order to compete with other topflight computer science programs in the country and improved the university's reputation and its ability to strengthen areas of faculty interest.

"Bob Funderlic was a leader, a visionary, an award-winning educator, and an internationally recognized numerical analyst," said Dr. Mladen A. Vouk, current Computer Science Department Head. "He provided critical leadership during the formative years of the Department, and he laid the foundations of the department we know today."

Virtual Tutors: NC State Receives \$3.5M Grant To Study Artificial Intelligence In The Classroom

While some students might dream of having a robot to help them with their homework, researchers at North Carolina State University are getting closer to making it happen.

NC State recently received a four-year, \$3.5 million grant to explore using artificial intelligence as a learning tool inside fourth- and fifth-grade science classrooms. Artificial intelligence is the science of giving computers human-like abilities to understand, plan, communicate, perceive, etc.

The project includes creating "CyberPads" – computer notebooks with artificial intelligence-based software that allows the user to create graphical representations that model different scientific phenomena they learn in the classroom.



"Fourth- and fifth-grade science classes have a particular focus on physical and earth sciences. The CyberPads will support interactive scientific modeling for topics such as electricity, landforms, weather and climate," explains **Dr. James Lester**,

NC State professor of computer science and the project's principal investigator. "Students will actually be able to sketch out these different concepts using the program, and then see the models come to life with animation, sound and narration."

Assisting the students in using the CyberPads will be "PadMates" – or intelligent virtual tutors that support science learning through interactive scientific modeling. The PadMates will be able to recognize the understanding of the student using the CyberPad and interact with them accordingly. For instance, a student struggling to grasp the concept of gravity would receive more detailed explanations and assistance than a student who quickly exhibits his or her understanding of the topic.

"Today's teachers are tasked with trying to provide focused instruction for each student in their classroom. And in a classroom with potentially 25 students at different points along a learning progression for any given science topic, you can see how extremely difficult – if not impossible – it is to give that sort of individualized attention," explains **Dr. Eric Wiebe**, NC State associate professor of math, science and technology education, and co-principal investigator on the project. "For years, studies have shown the important role one-on-one tutoring plays in a child's understanding – so using 'virtual' tutors will provide teachers important assistance."

The program will initially be rolled out in 16 fourth- and fifth-grade science classrooms in North Carolina, to be followed by an additional 44 classrooms in Texas and Cali-

fornia. As part of the program, professional development will be given to the teachers in order to prepare them to use CyberPads and PadMates in their classrooms as effective teaching tools. Researchers will study the students' problem solving skills – such as strategy, thinking and collaboration – as well as the level of engagement in learning the science concepts before and after the use of CyberPads to see if, and how, the tools impact learning.



CyberPads - computer notebooks with artificial intelligence-based software - allows the user to create graphical representations that model different scientific phenomena they learn in the classroom.

"Beyond supporting teaching overall science content knowledge, this system will also help students get creative in their problem-solving skills. This isn't just repeating back something they heard from their teacher – they'll actually be demonstrating an understanding of some very specific concepts," Lester says.

The project, "*The Leonardo Project: An Intelligent Cyberlearning System for Interactive Scientific Modeling in Elementary Science Education*," is funded by the National Science Foundation's Discovery Research K-12 program. In addition to Lester and Wiebe, the NC State project team includes **Dr. Mike Carter**, associate dean of the graduate school, and **Dr. Bradford Mott**, computer research scientist.

NC State Recognized as a 2009 Laureate for Cloud Computing

The Computerworld Honors Program recognized NC State University as a 2009 Laureate in the Education category for its VCL-based Cloud Computing Services case study in a medal ceremony at the Andrew W. Mellon Auditorium in Washington, D.C., on June 1, 2009.

Each year the program recognizes people, organizations and institutions from around the world whose visionary application of information technology promotes positive social and economic progress.

This is the second time NC State has received this recognition. The university was honored as a 2007 Laureate in the category of education for its Virtual Computing Laboratory (VCL) project.

NC State has been researching VCL open source technology since 2003, and operating on-demand cloud computing services in production settings since 2004. VCL was jointly developed by the College of Engineering, the Office of Technology, and the Computer Science Department.

VCL-based cloud computing was designed to deliver over-the-network on-demand and scheduled services that can give students access to advanced educational materials, select software applications, and comprehensive computing and storage resources.

The NC State Cloud Computing Services case study is included as part of the Global Program Archives on six continents and in the research collections of over 350 distinguished national archives, museums and institutions of higher learning.

Select Student Awards & Honors



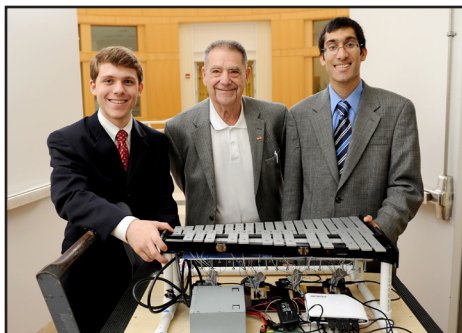
◆ Recent MS Degree graduate **Lucy Shores** (pictured above), has been awarded the prestigious and highly competitive **National Science Foundation (NSF) Graduate Research Fellowship**.

Shores worked on the Crystal Island game-based learning environments project under the direction of **Dr. James Lester**, professor of computer science. She is beginning work on her Ph.D. in educational psychology under the direction of **Dr. John Nietfeld**, associate professor in the department of Curriculum, Instruction & Counselor Education, one of the collaborators on the Crystal Island project.

◆ Congratulations to **Drew Boyuka** and **Jay Goel** (pictured below), recent graduates in the department of computer science, who have been presented **Donald L. Bitzer Creativity Awards**.

Boyuka and Goel created an Autonomous Glockenspiel as their final project for their CSC 453 Wireless Sensor Networks class.

Established by **Dr. Donald L. Bitzer**, Distinguished University Research Professor, and his wife Maryann, the Bitzer Creativity Award was created to recognize and encourage creativity in undergraduate computer science students.



◆ **IBM Ph.D. Fellowship Awards** have recently been presented to several computer science graduate students. In 2009, **Brian Bouterse** received the award, and in 2010, **Zhenhuan Gong** and **Ben Smith** received the awards. Award recipients are selected based on their overall potential for research excellence, the degree to which their technical interests align with those of IBM, and their progress to-date, as evidenced by publications and endorsements from their faculty advisor and department head.

Special thanks go to Bouterse's sponsor, **Dr. Harry Perros**; Gong's sponsor, **Dr. Xiaohui (Helen) Gu**; and Smith's sponsor, **Dr. Laurie Williams**; and to **IBM** for their continued support of our department and students.



◆ **Brittany Strachan** (pictured above), a senior majoring in computer science, was selected to the **2009-2010 ACC Women's Basketball All-Academic Team**. To be eligible for consideration for the academic squad, a student-athlete must have earned a 3.0 grade point average for the previous semester and maintained a 3.0 cumulative average during her academic career. Strachan excels both on and off the court. She was the top scoring reserve for the NC State women's basketball team last season, averaging 7.1 points and 3.4 rebounds per game. She led the ACC in three-point shooting with a 42.4 percent (39-92) shooting average.

◆ Eleven outstanding Teaching Assistants (TAs) recently received **Outstanding Graduate Teaching Assistant Awards** by the University Graduate Student Association (UGSA). Winners, along with their nominator are **Ahmet Can Babaoglu** (Dr. David Thuente), **Zhengzhang Chen** (Dr. Steffen Heber), **Brian Dellinger** (Dr. Donald Bitzer), **Xibin Gao** (Dr. Munindar Singh), **Nathan David Green** (Dr. Robert

Fornaro), **William Hendrix** (Dr. Nagiza Samatova), **Jason King** (Dr. Laurie Williams), **Jennifer Sabourin** (Dr. David Thuente), **John Slankas** (Dr. Ed Gehringer), **Derek Sollenberger** (Dr. Munindar Singh), **Stephen Ware** (Dr. Tao Xie).

◆ Three teams coached by **Dr. Thomas Honeycutt** made a strong showing in the Mid-Atlantic Regionals of the **35th ACM International Collegiate Programming Contest (ICPC)**, or "**Battle of the Brains**," held November 6 at the University of North Carolina at Chapel Hill. Team "**NCSU3**" made up of **Carson Holgate**, **Sean Reynolds** and **Michael Wright** captured 2nd at the UNC competition site, while placing 16th out of 160 teams. Team "**NCSU1**" made up of **Kunal Patel**, **Fuliang Thong**, and **Megan Wenzinger**, placed 4th at the Duke site while placing 21st out of 160 teams. Team "**NCSU2**" made up of **Craig Connors**, **Mark Draelos**, and **Michael Reece**, received an Honorable Mention at the Duke site. Special thanks to **SAS Institute** for their generous support of these teams and their efforts.



Fidelity Investments "Leadership in Technology" Executive Speakers Series

Thanks to the generous support of Super ePartner **Fidelity Investments**, we are pleased to invite you to the Spring 2011 "Leadership in Technology" Executive Speakers Series. Please mark your calendars for the Spring speakers:

Michael Tiemann - February 10
VP of Open Source Affairs at Red Hat

Sandy Costa - March 15
Author & Former President & CEO
of Quintiles

Jim Goodman - April 12
President & CEO of Capital
Broadcasting Company

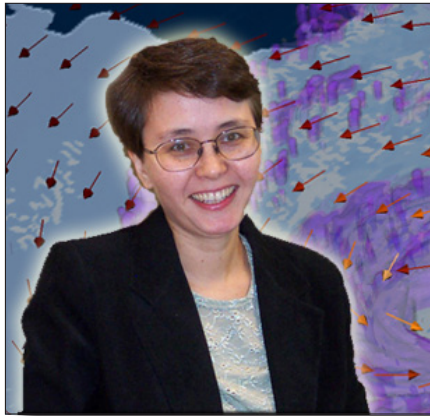
All talks are free and open to the public and are held at 6 p.m. in Room 1231 in EB2 on NC State's award-winning Centennial Campus. Please see the Computer Science Department website for more information and directions (www.csc.ncsu.edu).

Predicting the Effects Of Climate Change

North Carolina State University researchers are part of a major new research initiative from the National Science Foundation (NSF) aiming at improving climate scientists' ability to predict potential consequences of climate change. The work being done at NC State will focus on improving our ability to predict hurricanes and precipitation patterns.

At issue is a five-year, \$10 million NSF Expedition grant, "*Understanding Climate Change: A Data Driven Approach*," which aims to advance climate science by taking advantage of the wealth of climate data collected by satellites, ground-based sensors and physics-based climate simulations. The grant, which is being led by Professor Vipin Kumar from the University of Minnesota, includes \$1.8 million in funding for work that will be performed at NC State by **Drs. Fred Semazzi and Nagiza Samatova**.

Semazzi, a professor of marine, earth and atmospheric sciences at NC State, will be working to improve the prediction of Atlantic hurricanes by significantly advancing computational techniques used to analyze climate datasets. "The underlying hypothesis is that there may be hidden nuggets of knowledge within climate datasets, which may complement traditional physics-based insights," Semazzi says.



Semazzi's goal is to develop a new, more sophisticated, approach to Atlantic hurricane prediction. The new approach "will be based on a combination of the application of highly efficient high-performance computer algorithms, data-mining methods, data fusion and signal detection processing techniques to isolate the triggers for the development of Atlantic hurricanes," Semazzi explains.

Samatova (pictured above), an associate professor of computer science at NC State and joint faculty appointee at Oak Ridge National Laboratory, will be developing high performance data analytics algorithms and tools that will ideally be able to improve the accuracy and detail of climate forecasts. This is important, Samatova

says, "because much of the existing climate forecast data is on a large scale – addressing global trends for time scales of 100 years."

Specifically, Samatova will be developing software that can be used to model the climate system as a complex and dynamic network. Samatova's goal is for the software to use observational data and physics-based simulations to improve our ability to predict precipitation and hurricane activity on a regional level and over 10-year time periods.

"We also hope to tap into high-performance computing technologies to improve the response time for these climate models," Samatova says. "This should allow climate researchers to analyze data, and explore more hypotheses, much more quickly."

The other institutions affiliated with the grant include North Carolina A&T, the University of Tennessee and Northwestern.

NC State's Department of Computer Science is part of the university's College of Engineering; the Department of Marine, Earth and Atmospheric Sciences is part of the university's College of Physical and Mathematical Sciences.

Eight Faculty Receive 2010 IBM Faculty Awards

The NC State Department of Computer Science is very proud to announce that eight members of its faculty have been selected to receive 2010 IBM Faculty Awards totaling \$203,500. Winners of these highly competitive and selective awards include:

- **Dr. Rada Chirkova** – associate professor, with an award of \$29,000
- **Dr. Patrick Dreher** – adjunct professor, with an award of \$14,000
- **Dr. Xiaohui (Helen) Gu** - assistant professor, with an award of \$14,000
- **Dr. Christopher Healey** - associate professor, with an award of \$32,500
- **Dr. Michael Rappa** - distinguished university professor, with an award of \$40,000
- **Dr. Mladen Vouk** - professor and department head, with an award of \$34,000
- **Dr. Laurie Williams** - associate professor, with an award of \$20,000
- **Dr. Tao Xie** - associate professor, with an award of \$20,000

IBM Faculty Awards recognize outstanding faculty achievement and are renewable annually. But in keeping with the competitive spirit of the program, renewal nominations must be submitted and supported by an IBM technical sponsor and evaluated in the same process and criteria as the first award.

IBM is a valued Super ePartner with the department and is actively collaborating with our faculty and students on numerous programs and initiatives. NC State University is one of IBM's top suppliers of new graduate talent, worldwide.

Google DROID Donation Aids Research and Teaching Efforts

Google has donated 120 Motorola DROID smartphones to the department to be used for research and teaching. The equipment donation, valued in excess of \$50,000, is a great example of how NC State partners with industry leaders to develop innovative real-world applications and solutions with cutting-edge technology.

This publication is made possible by the generous support of **AT&T** and **First Citizens**.

Select Faculty Awards & Honors

◆ **Dr. Tao Xie**, associate professor of computer science, has received a **Faculty Early Career Development (CAREER) Award** from the National Science Foundation (NSF). This award, valued at \$425,000, supports his proposal “*Cooperative Developer Testing with Test Intentions*.” Xie becomes the **19th NSF CAREER Award winner for the department of computer science at NC State**.

◆ **Dr. Xuxian Jiang**, assistant professor of computer science, has received a **Faculty Early Career Development (CAREER) Award** from the **National Science Foundation (NSF)**. This award, valued at \$424,166, supports his proposal “*Towards Exterminating Stealthy Rootkits – A Systematic Immunization Approach*.” Jiang becomes the **20th NSF CAREER Award winner for the department of computer science at NC State** (18 currently on faculty), one of the highest concentrations of any department in the nation.

◆ Congratulations to **Dr. Laurie Williams**, associate professor of computer science, who was selected as the inaugural winner of the **Association for Computing Machinery (ACM) 2009 SIGSOFT Influential Educator Award**. The award is designed to recognize outstanding commitment to education in software engineering.

◆ **Dr. George Rouskas**, professor of computer science, has been named an **IEEE Communications Society Distinguished Lecturer** for 2010 and 2011.

◆ **Dr. Annie Antón**, professor of computer science, has been named one of ten distin-

guished academics to the non-resident **Fellows Program** for the **Center for Democracy & Technology (CDT)**. Antón is the only non-lawyer technology expert named to the program. Antón was also named a **2009 Distinguished Scientist** by the **Association for Computing Machinery (ACM)**.

◆ **Dr. R. Michael Young**, associate professor of computer science, has been named a **2010 GlaxoSmithKline (GSK) Faculty Fellow** by the **Institute for Emerging Issues**. The GSK Faculty Fellows Program helps inform and improve decision-making on state and local issues by utilizing the expertise of faculty in our state. He also was named **Research Director** for 2009 for the **Triangle Game Initiative**.

◆ **Ms. Margaret Heil**, associate director for the Computer Science Senior Design Center (SDC) and lecturer, has been named an **NC State Outstanding Teacher for 2009-2010**. Heil has been instrumental in the growth and success of the SDC, and has coordinated more than 275 teams of senior design students with over 70 industrial sponsors.

◆ **Dr. Tao Xie**, associate professor of computer science, has been selected to receive the **Sigma Xi Faculty Research Award**. He is the first recipient from the Department of Computer Science. Sigma Xi was designed to recognize outstanding young researchers, and to encourage and reward excellence in scientific research.

◆ **Dr. Harry Perros** has been named an **IEEE Fellow** by the **Institute of Electrical**

and Electronics Engineers (IEEE) for his contributions to performance evaluation modeling of computer networks. He is a Professor of Computer Science, an Alumni Distinguished Graduate Professor, and the Program Coordinator for the MS degree in Computer Networks. Perros becomes the **department's 5th IEEE Fellow**, following in the footsteps of **Drs. Donald Bitzer, Wushow “Bill” Chou, Mladen Vouk and Munindar Singh**, who were selected in 1982, 1987, 2001, and 2008 respectively.



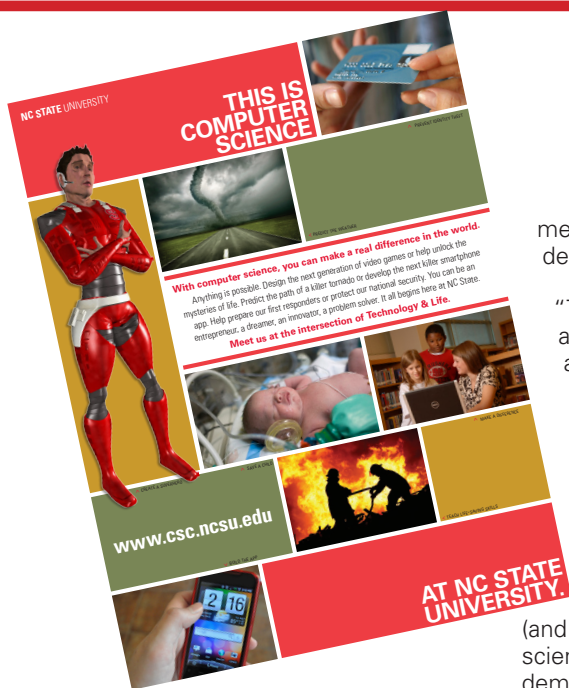
◆ Congratulations to **Dr. Douglas Reeves** who has been named the **Director of Graduate Programs**. Reeves replaces **Dr. David Thuente** who recently stepped down to return to teaching and research after a scholarly leave starting the fall semester 2010.

◆ Congratulations to **Dr. Donald Bitzer** who was named as a **2010 Inductee in the College of Engineering Hall of Fame at the University of Illinois at Urbana-Champaign**. Bitzer was recognized as the inventor of the plasma display monitor, forerunner of the modern flat panel television screen, and co-developer of PLATO, the first computer-based interactive educational network and home of the first online community. Dr. Bitzer was also honored at “**PLATO@50**”, a special conference at the Computer History Museum in Mountain View, CA, which commemorated PLATO's amazing legacy and wide influence.

◆ Five members of the Department of Computer Science have been selected as recipients of the “**Pride of the WolfPack**” Awards: **Carlos Benavente**, IT Manager of the Computer Science Department (August 2009); **Dr. Barbara (Jasmine) Adams**, Director of Undergraduate Advising, **Ann Hunt**, Contracts and Grants Manager, and **Dr. David Thuente**, Professor and former Director of Graduate Programs (September 2009); and **Linda S. Honeycutt**, Office Manager of the Computer Science Department (March 2010). The awards are designed to recognize NC State employees for a special or unique contribution to their college/unit or the University.



In what she calls her ‘trip of a lifetime,’ **Dr. Annie Antón**, professor of computer science, recently completed a successful trek to the summit of Kala Patthar at over 18,000 ft and the famed Everest Base Camp in Nepal! Antón and 21 other trekkers participated in “**Trekking for Kids: the Nepal Trek 2010—Everest Base Camp**” expedition. She and her fellow trekkers have raised more than \$55,000 for the Orphan Children Rescue Center (OCRC) in Bhaktapur, Nepal.



Computer Science Department Launches New “Future Students” Campaign and Website

ment and external relations for the department.

“The reality is that computing permeates every aspect of our lives, crosses all geo and social boundaries, and provides a platform for creativity and innovation that will allow graduates to make a difference in the world.”

Feedback from advisors and teachers from across the state has been over-whelmingly positive according to Tate. The collateral is helping teachers show students (and potential recruits into the computer science discipline) real world applications demonstrating the importance of science and math.

“We are very excited about the positive feedback we’ve received so far,” says Dr. Mladen Vouk, head of the Computer Science Department at NC State University. “We particularly hope the campaign is successful in attracting more females and under-represented minorities into the discipline.”

In addition to pertinent information about the department, including admissions information, coursework, career opportunities, etc., the new web site features video and static profiles on computer science alumni, students and professors. Among those featured with video profiles are: **Nate Johnson** (B.S. 2000), meteorologist/executive producer at **WRAL-TV**, who combines his passion for the weather with computer science that helps him do more with data; **Josh Whiton** (B.S. 2004), founder and CEO of **Transloc**, a company that designs software that tracks mass transit systems in real-time and makes that information available to your mobile handheld device or computer; and

Brittany Strachan, a senior majoring in computer science who plays small forward on the Wolfpack women’s basketball team and was selected for the 2009-2010 ACC Women’s All Academic Team.

This outreach effort was made possible by the generous support of corporate partners **Duke Energy, Cisco, EMC, Harris, I-Cubed, AT&T, Red Hat, SAS, Tekelec, NetApp, Northrop Grumman & Progress Energy**, as well as the **ePartners Program** and the **NC State Engineering Foundation**.

Thanks to the generous support of numerous corporate sponsors, the Department of Computer Science at NC State University recently launched a comprehensive “Future Students” campaign, designed to show how computer science graduates are making a real difference in the world in a socially relevant way.

Print and email collateral will complement a dynamic new Future Students web site, which contains a variety of profile stories and videos designed to answer the questions “Why Computer Science?” and “Why at NC State?” in a compelling way. Two of the video profiles are also being used by NC State’s central admissions office.

Posters and promotional materials have been distributed to over 10,000 middle and high school advisors, counselors, and science & math teachers. “First and foremost, this is a campaign to dispel the popular misconception of computer science as simply coding and programming,” says Ken Tate, director of develop-

CREDITS: Photography & Graphics: Nate DeGraff, Becky Kirkland, Roger Winstead; **Stories & Content:** Caroline Barnhill, Tammy Coates, Nate DeGraff, Matt Shipman, Zack Smith, Ken Tate; **Layout/Design:** Tammy Coates, Jessica Tate

Contact Information

NC State University
Dept. of Computer Science
Campus Box 8206
Raleigh, NC 27695-8206
Phone: 919-515-2858
Fax: 919-513-1684
Web: www.csc.ncsu.edu

Primary Contact: Ken Tate,
Director of Development &
External Relations - tate@csc.ncsu.edu

Online Alumni Contact update available:
http://www.csc.ncsu.edu/alumni/alumni_update.php

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