NC STATE UNIVERSITY Computer Science CONDECTOR DESCRIPTION

Summer 2012

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Marshall Brain Recognized as 2011 College of Engineering Distinguished Alumnus

The College of Engineering at North Carolina State University has named **Marshall D. Brain**, founder of HowStuffWorks.com, a 2011 College of Engineering Distinguished Alumnus.

The awards were presented by Dr. Louis A. Martin-Vega (pictured below with Brain), dean of the College of Engineering, at a banquet held January 26 at the Park Alumni Center on NC State's Centennial Campus. The award honors alumni whose accomplishments further their field and reflect favorably on the university.

Brain graduated from NC State in 1989 with a master's degree in computer science. Nine years later, he founded HowStuffWorks.com, an award-winning website that offers easy-to-understand explanations of how the world around us actually works. Brain created the website as a hobby, and as it grew, he carried it through several rounds of venture funding totaling approximately \$8

million. Discovery Communications purchased the site for \$250 million in 2007.

Brain is the author of more than a dozen books and has been a guest on TV and radio programs nationwide, including "The Oprah Winfrey Show" and "Modern Marvels." Brain also hosted the National Geographic Channel's "Factory Floor with Marshall Brain," a show that gives viewers an inside look at how factories create products like airbags, tennis balls and fire extinguishers.

Prior to his career as a successful entrepreneur, Brain lectured in NC State's Depart-



ment of Computer Science for six years, earning recognition as a member of the NC State Academy of Outstanding Teachers. This spring, serving as a Distinguished Engineering Lecturer in the Computer Science Department, he taught a class called "Enterprise Innovation" which helps students "develop an entrepreneurial mindset that allows ideas to move from the drawing board to the marketplace."

Brain and his wife, Leigh, have contributed financially to NC State and have maintained close ties to the university. He has spoken at NC State's Entrepreneurs' Lecture Series, the Fidelity Investment "Leadership in Technology" Executive Speakers Series, and Engineers Week. He also was the emcee for the 2010 summit on the National Academy of Engineering Grand Challenges in Raleigh, an event co-hosted by the College and Duke University's Pratt School of Engineering.

The other 2011 College of Engineering Distinguished Alumni recipients are William H. Dean, president and CEO of M.C. Dean, Inc.; and Robert R. Womack, former chairman and CEO of Zurn Industries, LLC.

From the Department Head Dr. Mladen Vouk



Greetings from Centennial Campus! Over the last year, our department has continued to experience exciting growth, we have received numerous accolades

and professional recognitions, and we have welcomed several new faculty. Our enrollments continue to increase (now over 1,300 students), as does our research productivity and funding (>\$44M in active research). We are particularly grateful for the generous financial support from our alumni, friends and corporate partners (~\$1M in total cash contributions from all sources). This issue of Connected is filled with related news, but below are a few highlights that I want to share:

UNDERGRADUATE PROGRAM:

• In 2011-2012, we awarded 107 BS degrees, an upward trend expected to continue for several more years. In the fall of 2011, we had 695 undergraduate students including 40 who are double majors. • Demand for our undergraduates has surged as the economy has improved. Many of our graduates received multiple offers, and average starting salaries were almost \$60K, among the highest in the College of Engineering. Large numbers of our undergraduates were hired by the likes of Cisco, Fidelity Investments, IBM, NetApp and SAS Institute. But a large number of students pursued careers with smaller companies or entrepreneurial opportunities.

• Our Game Development Concentration, one of the top in the nation, continues to grow, now with an enrollment of 55 students.

GRADUATE PROGRAM:

Our graduate program continues to thrive! Applications for fall admission increased by over six percent this year. In Fall 2011, we enrolled 576 graduate students; 175 were PhD students – both record highs for the department. Similarly, we awarded a record number of graduate degrees (215), including 15 PhDs.
As with our undergrads, demand for our graduate students is extremely high, with starting salaries for our masters students averaging approximately \$85K, while starting salaries for our PhD students are starting around \$110K and some have exceeded \$150K. Some of the top consumers of our graduate talent include Cisco, IBM, Microsoft and Amazon.com.

RESEARCH:

• Our research productivity continues to grow with annual research expenditures in the range of \$12M. We now have an all time high of over \$44M in active research grants, which ranks us well within the top 20 for sponsored research funding among computer science departments in colleges of engineering.

• The department welcomed four new faculty members: Drs. Randy Avent (defense analytics), Kristy Boyer (intelligent tutoring systems), William Enck (systems security) and David Sturgill (parallel systems, competitive learning).

SHADES OF THINGS TO COME:

From my perspective, we clearly have much to be proud of. Our department is a national leader in gaming, educational informatics, heatlthcare IT, cybersecurity, cloud computing and analytics, and we play a key role in the multi-disciplinary efforts relating to NC State's strategic research areas: health & well-being, energy & environment, educational innovation, and safety & security. We are not only one of the largest producers of talent in the nation, our graduates are highly valued and sought after by the most innovative and respected companies in the world. Our corporate relations program is a model revered across the nation. And whether it is identifying the latest security threat to our smartphones or improving the speed and efficiency of our wireless networks or designing the future of the Internet, our faculty and students are making a real difference in the world, every day!

Despite being recognized as one of the nation's top computer science programs, we face some very real challenges given the continued reduction of state funding. First and foremost, we must substantially increase our department's endowment levels, with the specific goals of naming the department and adding more named distinguished professorships. Growing our endowment produces transformational impact now, as well as creating a reliable source of support in perpetuity, minimizing the adverse impact of cyclical dips in the economy. The addition of more named professorships will allow us to attract and retain world-class research faculty. We will also work closely with our corporate partners to tweak our undergraduate and graduate curriculum to align with evolving business needs. We will continue to work closely with University leadership to virtualize the research and educational resources of Centennial Campus to meet the growing technology needs of the state and beyond for decades to come.

If you are reading this, you are probably one of more than 6,500 CSC alumni spread across the US and in over 20 countries around the globe. In light of the challenges I have outlined above, I encourage you to come back to campus, explore how you can get involved, and help us continue our upward trajectory.

Welcome New Strategic Advisory Board Members

Dr. Mladen Vouk, head of the NC State Department of Computer Science, is pleased to announce the addition of four new members to the department's Strategic Advisory Board (SAB) in 2012:

- Jerry Frederick (B.S. CSC '86) Sr. VP, Bank of America
- Mike Huska (B.S. CSC '89) CTO, Incential Software
- Chuck Musciano VP & CIO, Martin Marietta Materials
- Gareth Stageman Director,
 Deutsche Bank Global Technology

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 **Greg Keller**, Sr. Director of Scalable SAN Engineering at NetApp. **Troy Tolle**, VP & CTO of Infinity Learning Solutions, is the current vice-chairman.

Fearrington Establishes Named Scholarship Endowment



Computer Science alumnus **Jesse Fearrington (B.S. '73)** has recently finalized gift plans to establish the **Jesse Fearrington Scholarship Fund Endowment**. The endowment is anticipated to have a value up to \$500,000.

The endowment will provide need-based scholarships for students in the College of Engineering at NC State, with first preference going to students from Jesse's home county of Chatham County, NC who are seeking a degree in Computer Science. Second preference goes to students in the College of Engineering; then it would be open to students pursuing any math or science degree. If no student from Chatham County is interested in pursuing such a degree, then the scholarship would be open to any student from a rural county in North Carolina seeking any of the same degrees. Awards will be renewable for up to three additional years, or until the student completes his or her undergraduate studies, as long as the recipient maintains satisfactory grades and academic progress.

Jesse graduated from NC State in 1973 with a B.S. in Computer Science. He is retired Senior Vice President and Director of Cross Channel Solutions with Wachovia's Retail and Channel Technologies organization. Prior to holding this position, Jesse also served as the Director of Retail Lending and as an architect in Advanced Technology Group. Prior to joining Wachovia in 1996, Jesse worked for BellSouth for 23 years. At BellSouth, Jesse served in several capacities where he focused on implementing new technologies, programmer productivity, and the last five years, designing and implementing networks and desktop equipment for internal BellSouth use.

Jesse has served on the NC State Computer Science Department's Strategic Advisory Board for two terms, and was Vice Chair in 2008, and Chair in 2009.

Jesse, a native of Chatham County, NC, attended Pittsboro High School. He and his wife, Barbara, currently live in Charlotte, NC, but they maintain strong ties back to Chatham County. Dating back to 1786, Jesse's family was the original owners of 640 acres of land in Chatham County that eventually became Fearrington Village. They retained ownership of the land until the late 1960's when Jesse's father, Jesse, Sr., began looking for a buyer who would preserve the historic and aesthetic qualities which had made it an important part of the area for so long. R. B. Fitch purchased the farm in 1974 and named the community Fearrington to honor the stewardship of Jesse and his forebears.

The Jesse Fearrington Scholarship Fund is being created to recognize the contribution that NC State has made to Jesse and his family. Four generations have attended NC State. John Bunyon "Bun" Fearrington was the first to attend several classes on proper farming techniques hosted by the NC State Extension Service in the 1920's. Jesse's father, Jesse Sr., attended NC State and is a member of the Class of 1942. He went on to be a successful dairy farmer in Chatham County. And Jesse's son, John, is currently enrolled in the Civil Engineering program, and is a member of the Class of 2012.





Scholarship Endowment to Honor Dr. Thomas Honeycutt

Dr. Thomas L. Honeycutt, associate professor of computer science, has retired after more than 40 years of distinguished service to NC State's Department of Computer Science. He received his Ph.D. from NC State University in 1969, and joined the department in 1970. Except for a three-year industry assignment at Texasgulf, he has served the department in a variety of roles for the past 40 years.

Upon hearing of Honeycutt's retirement plans, several alumni have suggested doing something special as a tribute to this department. Distinguished Engineering Alumnus, **Bobby R. Johnson, Jr. (B.S. '77)**, founder and former CEO of Foundry Networks, recalls the impact that Honeycutt had on his career saying, "Tom helped me get my first job at IBM and helped make valuable connections that served as the foundation for my career." Bobby and his wife, Donna, have taken the lead role in helping establish an endowment in Honeycutt's honor. They are pledging to match dollar-for-dollar the collective donations received up to \$50,000 toward the creation of the **Dr.Thomas L. Honeycutt Scholarship Endowment**.

Proceeds from the Endowment will be used to provide need-based undergraduate scholarship support with a preference to students who are first generation college students and/or students from military families.

Individuals or corporations interested in contributing to this fund can send a check made payable to the "NC State Engineering Foundation" noting for the "Dr. Thomas L. Honeycutt Scholarship Endowment" in the memo section. Donations can be sent to the NC State Department of Computer Science, Attn: Ken Tate, Campus Box 8206, Raleigh, NC 27695.

NSA Science of Security "Lablet" Established at NC State

NC State University, the University of Illinois at Urbana-Champaign and Carnegie Mellon University are each receiving an initial \$2.5 million in grant funds from the U.S. National Security Agency (NSA) for creation of a more scientific basis for the design and analysis of trusted systems.

The co-principal investigators for the NC State Science of Security Lablet are **Dr. Laurie Williams**, professor of computer science, and **Dr. Michael Rappa**, director of the **Institute of Advanced Analytics** and professor of computer science.

It is widely understood that critical cyber systems must inspire trust and confidence, protect the privacy and integrity of data resources, and perform reliably. To tackle the ongoing challenges of securing tomorrow's systems, the NSA concluded that a collaborative community of researchers from government, industry and academia is a must.

To that end, the NSA grant has seeded academic "lablets" focused on the development of a Science of Security (SoS) and a broad, self-sustaining community effort to advance it. A major goal is the creation of a unified body of knowledge and analytics methods and tools that can serve as the basis of a trust engineering discipline, curriculum, and rigorous design methodolo gies. The results of SoS lablet research are to be extensively documented and widely distributed through the use of a new, network-based collaboration environment. The intention is for that environment to be the primary resource for learning about ongoing work in security science, and to be a place to participate with others in advancing the state of the art.

The NC State lablet,

which will be housed in the **Institute for Next Generation IT Systems (ITng)**, will contribute broadly to the development of Security Science while leveraging NC State's expertise and experience in analytics, including the extensive expertise available in the NC State **Institute of Advanced Analytics**.

"The security fortification technique of data encryption has a sound mathematical basis, providing a predictable and quantifiable level of security based upon the strength of the encryption algorithm," Williams says. "Conversely, the science behind other security techniques that provide vulnerability prevention, detection and fortification is either rudimentary or does not exist. As a result, the principles of designing trustworthy systems often are not rooted in science. The three SoS lab



lets established by the NSA will research techniques to provide this scientific basis."

The lablet's work will draw on several fundamental areas of computing research and on the related analytics. Some ideas from fault-tolerant computing can be adapted to the context of security. Strategies from control theory will be extended to account for the high variation and uncertainty that may be present in systems when they are under attack. Game theory and decision theory principles will be used to explore the interplay between attack and defense. Formal methods will be applied to develop formal notions of security resiliency. Endto-end system analysis will be employed to investigate resiliency of large systems against cyber attack. The lablet's work will draw upon ideas from other areas of mathematics, statistics and engineering as well.

NC State to Collaborate on "Big Data" Initiative

Aiming to make the most of the fastgrowing volume of digital data, the White House Office of Science and Technology Policy recently announced a "**Big Data Research and Development Initiative.**" By improving our ability to extract knowledge and insights from large and complex collections of digital data, the initiative promises to help solve some of the Nation's most pressing challenges.

To launch the initiative, six Federal departments and agencies are committing more than \$200 million that will greatly improve the tools and techniques needed to access, organize and glean discoveries from huge volumes of digital data.

NC State University will collaborate with six research laboratories and six universities on a \$25 million, five-year project, the Scalable Data Management, Analysis, and Visualization (SDAV) Institute. SDAV is funded through the U.S. Department of Energy's Scientific Discovery through Advanced Computing (SciDAC) program.

SDAV is a collaboration tapping the expertise of researchers at **Argonne**, **Lawrence Berkeley**, **Lawrence Livermore**, **Los Alamos**, **Oak Ridge** and **Sandia** national laboratories, and in seven universities: **Georgia Tech**, **NC State**, **Northwestern**, **Ohio State**, **Rutgers**, the **University of California at Davis** and the **University of Utah**. The SDAV will help scientists develop new tools to help scientists manage and visualize data on the DOE's supercomputers, which will further streamline the processes that lead to discoveries made by scientists using the DOE's research facilities. The need for these new tools has grown as the simulations running on the DOE's



supercomputers have increased in size and complexity.

NC State's portion of the award is \$750,000. **Dr. Nagiza Samatova**, associate professor of computer science at NC State, is the co-PI on this project with **Dr. Anatoli Melechko**, associate professor in the Materials Science and Engineering Department.



◆ President Barack Obama recognized Ph.D. student **Sina Bahram** (above) as one of 14 "**Champions of Change**" at a White House ceremony May 7, honoring those who have made significant efforts to make science, technology, engineering and mathematics (STEM) more accessible to people with disabilities.

Bahram hopes to use technology to facilitate access to all kinds of information for users with various functional limitations or specific needs. He has developed a prototye system called "Touch It, Key It, Speak It" (TIKISI) which allows computer users to access graphical information in an "eyes fee" fashion. TIKISI can already help blind users interact with Google Maps, and Barham is working with other researchers to apply it to other materials, such as flow charts.

◆ Congratulations to senior Alan Sheridan (below) on being named a 2011 Leader of the Pack. This replaces the traditional homecoming king and queen and recognizes students who make outstanding contributions to NC State in the areas of leadership, scholarship, and community service.



Student Wolf Bytes

◆ Congratulations to Ph.D. student **Rogelio Cardona-Rivera** who was the recipient of a prestigious **Department of Energy Computational Science Graduate Fellowship (DOE CSGF)**. Program benefits include a \$36,000 yearly stipend, payment of all tuition and fees, yearly conferences, \$5,000 academic allowance in the first fellowship year, \$1,000 academic allowance each renewed year, and a 12week research practicum. The Fellowship is renewable for up to four years.

◆ Congratulations to Ph.D. student **Rob**inson Udechukwu on receiving a prestigious **GEM Fellowship**. Fellows receive a \$16,000 stipend in the first academic year of the Fellowship, GEM University support (stipend and assistantships) for subsequent years, up to five, equivalent to other funded doctorate students in the department, and full tuition and fees.

◆ The 2012 CSC Outstanding Seniors are Anne M. Watson (Scholarly Achievement Award), M. Alex Poulos (Humanities Award), and Daniel R. Lauck (Leadership Award).

 Congratulations to the NC State Students & Technology in Academia, **Research and Service (STARS) Student** Leadership Corps (SLC) on receiving the 2010-2011 Deborah S. Moore Service Award for Outstanding Non-Service Club of the Year. The award recognizes exemplary service and outstanding volunteerism by students and clubs, and they are presented by the Center for Student Leadership, Ethics and Public Service (CSLEPS). STARS SLC projects include SPARCS (Students in Programming, Robotics and Computer Science) @ Centennial Middle School, and SPARCS @ Durham Nativity School. SPARCS is a middle school outreach program aimed at broadening participation in computer science.

◆ Ph.D. student **Bushra Anjum** (below) received the 2011 **Phi Kappa Phi "Love of Learning" Award** based on her "superior academic record and life/career ambitions." Eighty awards of \$500 were presented; Anjum was one of three winners from NC State.



Anjum was also selected to attend several nationwide workshops including the 2012 Google Graduate Researchers in Academia of Diverse Backgrounds (GRAD) CS Forum, the Career Mentoring Workshop (co-located with SIGSE 2012), IEEE N2Women Workshop (co-located with IN-FOCOM 2012), and the CRA-W Graduate Cohort Workshop. Anjum was also recognized by the NC State Graduate School for her participation in the Preparing Future Leaders (PFL) programs including the PFL Season Pass (Fall 2011-Spring 2012), the Graduate Leadership Development Series (Spring 2012), and she received a Certificate of Accomplishment in Teaching Graduates (Fall 2011-Spring 2012).

◆ Congratulations to **Kellie Jones** and **Natalie Kerby** who were awarded the **Donald L. Bitzer Creativity Awards** for 2010-2011. This year's winners are **William Formyduval, Thomas Pensyl** and **Eric Whitmire**.

Our Financial Needs Change as Our Life Evolves.

In fact, if you are now a:

- Grandparent wanting to help with college expenses,
- ✓ Baby-boomer or Gen X who wants to supplement your retirement plans
- ✓ Retiree on a fixed income
- Adult caring for aging parents

then you might be an excellent candidate for a **Charitable Gift Annuity**. Contact Ken Tate (tate@csc.ncsu.edu) and he will connect you with one of NC State's gift planning experts. There is no cost; you have nothing to lose!

NC State Developing Video Game to Boost Computer Science Knowledge

NC State researchers are launching a project to develop a video game that will help improve computer science knowledge in middle school students – and contribute to a better-educated workforce in the future. The game, which is being developed under a \$1 million grant from the National Science Foundation (NSF), could be used nationally if it proves successful.

"Looking ahead, the United States is facing a significant shortage of people who will be able to fill jobs in science, technology, engineering and mathematics fields. That shortage is particularly acute for computer science," says Dr. James Lester, a professor of computer science and primary investigator (PI) of the project. "Forecasts consistently predict that we will have far more computer science jobs than there will be trained personnel to fill them."

Researchers hope the project will encourage students to pursue a career in computer science.

One reason for this problem is a lack of students entering college with a basic knowledge of computer science. The shortage is particularly marked among girls, who tend to steer away from math and computer science in middle school, studies show.

"Our goal is to create a video game that will help middle-school students under-

stand basic computer science concepts and related skills," Lester says. "We want to encourage students to pursue computer science in high school and beyond, and we want to give them the foundation they'll need to do so successfully."

While the project is not specifically focused on boys or girls, the researchers plan to incorporate game elements designed to engage female students. For example, elements of the game will be linked to real-world issues such as public health and environmental challenges, which have been shown to appeal to female students.

The researchers will also be working with middle-school teachers and administrators in North Carolina to develop and test the game – and to assess the effectiveness of the program in the classroom.

"We need to make sure this produces real results," Lester says. "And if it does, we would like to roll the program out nationally."

Co-Pls on the project include **Dr. Kristy Boyer**, an assistant professor of computer science; NC State computer research scientist **Dr. Bradford Mott**; and **Dr. Eric Wiebe**, an associate professor of science, technology, engineering and mathematics education at NC State.

NC State's Video Game Design Program Recongnized by The Princeton Review



For the second year in a row, NC State University has been recognized as one of the top undergraduate programs to study video game

design on The Princeton Review's third annual list saluting the best schools in the U.S. and Canada. The list, "Top Schools for Video Game Design Study for 2012," recognizes a total of 50 institutions for their outstanding game design education programs. It names 10 undergraduate and 10 graduate schools in rank order to its respective "top 10" lists, and 22 undergraduate and eight graduate schools as Honorable Mentions. NC State received an Honorable Mention on the undergraduate program listing.

The list is published on The Princeton Review's website at www.princetonreview. com/game-design.aspx.

The Princeton Review chose the schools based on a comprehensive survey it conducted in the 2011-2012 academic year of administrators at 150 institutions offering game design coursework and/or degrees in the United States and Canada.



Four Faculty Receive 2011 IBM Faculty Awards

The NC State Department of Computer Science is very proud to announce that four members of its faculty have been selected to receive 2011 IBM Faculty Awards totaling \$95,000. Winners of these highly competitive and selective awards include:

- Dr. Rada Chirkova associate professor, with an award of \$20,000
- Dr. Xiaohui (Helen) Gu assistant professor, with an award of \$15.000
- Dr. Christopher Healey associate professor, with an award of \$30,000
- **Dr. Mladen Vouk** professor and department head, with an award of \$30,000

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.

Faculty & Staff Wolf Bytes



◆ Dr. George Rouskas (above), professor of computer science, has been named an IEEE Fellow by the Institute of Electrical and Electronics Engineers (IEEE) for his contributions to optical network design research. Rouskas becomes the department's 6th IEEE Fellow, following in the footsteps of Drs. Donald Bitzer, Wushow "Bill" Chou, Mladen Vouk, Munindar Singh and Harry Perros who were selected in 1982, 1987, 2001, 2008 and 2010, respectively.



◆ Dr. Xiaohui (Helen) Gu (above), assistant professor of computer science, has received a Faculty Early Career Development (CAREER) Award from the National Science Foundation (NSF). This award, valued at \$450,000, supports her proposal "Enable Robust Virtualized Hosting Infrastructures via Coordinated Learning, Recovery and Diagnosis." Gu becomes the 21st NSF CAREER Award winner for the department of computer science at NC State.

◆ Drs. Frank Mueller and Laurie Williams, professors of computer science, have both been named a 2011 Distinguished Scientist by the Association for Computing Machinery (ACM). The program recognizes ACM members who have made significant accomplishments or achieved a significant impact on the computing field. ◆ Congratulations to **Dr. Frank Muel**ler on being named a member of the **IEEE Computer Society's Golden Core**. Mueller joins **Dr. Mladen Vouk**, Head of the Computer Science Department, who was named a member of the Golden Core in 2011.

◆ Over the past year, **Dr. Xuxian Jiang**, associate professor of computer science, and his students have identified at least 20 different pieces of malware in the official Android marketplace and in alternative marketplaces that target users. He was the first to find such well-known malware as **DroidKungFu** and **GingerMaster**. His work has earned him an enormous amount of news coverage from *Wired* magazine to *The Wall Street Journal*.

◆ Dr. Rudra Dutta, associate professor of computer science, and PhD student Parth Pathak, have developedother researchers have created a wireless mesh network called CentMesh on NC State's Centennial Campus. CentMesh will allow researchers to explore questions on mesh network design and security. It will also be used for teaching students about networking and programming through real world, hands-on experience.

◆ Two members of the Department of Computer Science have been selected as recipients of the **"Pride of the WolfPack" Awards: Jeremy Meeler**, and **Trey Murdoch**, both Operations and Systems Analysts, won for June, 2011. The awards are designed to recognize NC State employees for a special or unique contribution to their college/unit or the University.

◆ Dr. Barbara (Jasmine) Adams, Director of Undergraduate Advising in the Computer Science Department, is a 2011 recipient of the George H. Blessis Outstanding Undergraduate Advisor Award. The award honors advisors who consistently and willingly give their time and effort to advising, counseling and mentoring their students.

♦ Dr. R. Michael Young, professor of computer science, was a Fabulous Faculty Series presenter in November, 2011. Young, is founder and director of the NC State Digital Games Research Center and directs the Liquid Narrative Group. He discussed how the video game, once an adolescent distraction, is now rehabilitating veterans, teaching science, solving crimes, extending lives, securing computer networks, making millions and creating jobs.



◆ Dr. Douglas Reeves (pictured above at right with Susan Nutter, Director of NCSU Llbraries), Director of the Computer Science Graduate Programs and Professor of Computer Science, has been named the 2011 NC State Libraries Faculty Award Winner. The award is given to an NC State faculty member who has contributed consistently and notably to the Libraries' mission, vision, and strategic initiatives.

◆ Dr. Peng Ning (below), professor of computer science, has received a 2011 IBM Open Collaborative Faculty Award. His Open Collaborative Research (OCR) project is the only one in IBM history to receive a fourth year renewal. The total amount of the award is now \$300,000.



◆ Congratulations to **Mr. Andrew Sleeth**, admissions specialist in the graduate office, who was recently recognized as one of three recipients of a **College of Engineering 2012 Award for Excellence**. **Carlos Benavente**, IT Manager, was also nominated for the award. North Carolina State University Department of Computer Science Campus Box 8206 Raleigh, NC 27695-8206

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Computer Science Department Launches Student Ambassadors Program

The NC State Computer Science Department is pleased to announce the launch of the **NC State University Department of Computer Science Student Ambassador Program**. Twenty-four undergraduates were selected this spring as the first class of Ambassadors. They will begin their academic year of service with the Fall 2012 semester.

The Ambassadors are a select group of sophomores, juniors and seniors who will serve as an extension of the department in support of its external relations and outreach efforts. They will be presented with a variety of representational and developmental opportunities throughout the year including University and College of Engineering Open Houses, the Computer Science ePartners Career Fair, Fidelity Investments Leadership in Technology Speakers Series, the Welcome Back Bash, year end pig pickin' and more. By the very nature of the role, Student Ambassadors will be required to promote NC State University, the College of Engineering, the Department of Computer Science and the computer science discipline.

The 2012 CSC Student Ambassadors are:

Seniors - Joshua Blue, Nicole Collichio, Malcolm Cosh, Steven Elliott, KaMar Gal-Ioway, Sankeerth Goli, Ravelle Kelley, Kayla Melvin, and Alan Sheridan;

Juniors – Daniel Goslen, William Higgins, Lara Stocks, Kristina Topchieva, and Bethany Vohlers; and

Sophomores – Woodrow Barlow, Richard Hopper, Karthik Krismamarthy, Crystal Martin, Bryce Pilcher, Jonathan Poston, Xavier Primus, Anya Raspopovic, Alexandria Vail, and Jamaal Whitfield.

"We are excited and honored to have these young men and women serve as the 'face of the computer science department' to our visitors and recruits throughout the year," says Ken Tate, Director of Development and External Relations. "They are a very talented and accomplished group, and they have set a very high bar for all the ambassadors who will follow in their footsteps."



Mark Your Calendars! College of Engineering Homecoming Friday, November 2, 2012, 11:30 a.m.

Kick off the 2012 Homecoming weekend with hundreds of other NC State engineering alumni. The NC State Engineering Foundation is planning an event for Friday, Nov. 2 to celebrate the 125 years of engineering at NC State.

Catch up with friends, enjoy food and refreshments, and hear from current students and faculty on the College's latest research and education programs. Then stick around for the weekend to watch the Wolfpack football team take on Virginia.

More details will be available soon. Please see the CoE Homecoming website at **www.engr.ncsu.edu/alumni/homecoming/** or call 919-515-7458.

All Student Ambassadors are matriculated CSC undergraduate majors at the sophomore level or higher. They may be nominated in the spring by faculty/staff or apply directly for consideration. Ambassadors work in one-year terms, renewable until they graduate, at the discretion of the department leadership based on overall participation, performance and academic progress.

 CREDITS: Photography & Graphics: Nate De-Graff, Becky Kirkland, Roger Winstead; Stories
 & Content: Tammy Coates, Matt Shipman, Ken Tate; Layout/Design: Tammy Coates

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

North Carolina State University is committed to quality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, national origin, religion, sex, sexual orientation, age, or disability. NC State University commits itself to positive action to secure equal opportunity regardless of those characteristics.

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