As evidenced by the pages of this newsletter, during 2012-13 the Department of Computer Science continued to be a vibrant part of UNCW, the local community and the greater professional community. Mirroring trends at universities nationwide, enrollment in computer science programs continued to grow for the fourth year in a row. The graduate program in computer science and information systems also reported sustained interest in its offerings. The Face Aging Group continued its impressive track record of securing external funding for its research. Demonstrating their commitment to excellence inside and outside the classroom, computer science faculty continued to publish their scholarship at international conferences and journals, in many cases co-authoring papers with their students. Ron Vetter continued to serve as the editor-in-chief of IEEE Computer. Funded by grants from NC QUEST (North Carolina Quality Educators through Staff Development and Training), and the Computer Science for High School (CS4HS) program from Google, computer science faculty partnered with colleagues in the Watson College of Education to introduce computing into the middle-school mathematics curriculum in select schools in Southeastern North Carolina. The department takes pride in its dedication to teaching, research and service and, as the accomplishments described on the following pages show, this year was no exception.

As always, I invite you to be a part of the UNCW computer science community in any way that you can. Look for us on Facebook and on LinkedIn, and if you happen to visit Wilmington, we would love for you to drop by and say hello. Incidentally, this edition of the departmental newsletter marks my last as department chair. After serving as the department chair for eight years, I am returning to my role as a faculty member at the end of the academic year. Laurie Patterson, associate professor of computer science, assumed the role of department chair effective July 1, 2013. It has been my pleasure to work with such a wonderful group of faculty, staff and students over the past eight years. I have enjoyed serving as department chair, but I also look forward to returning full-time to the classroom.

Sridhar Narayan, professor and Ph.D.
David R. Berman, professor of computer science, retired at the end of the spring semester 2013. He arrived at UNCW in 1981 after completing a Ph.D. in mathematics at The University of Texas at Austin and a postdoc at the University of Utah. He was hired as a mathematics faculty member in the Department of Mathematical Sciences at UNCW, a department that contained mathematics, mathematics education, computer science, and statistics. He had strong interests in discrete mathematics, the foundations of mathematics, algorithms, and algebraic geometry. In the early 1980s, the computer science program was in a state of rapid growth and there was a critical need of faculty to teach the courses. Berman was invited to teach in the program in 1982 and began teaching the two-course sequence: formal languages, automata, and the theory of computability, which he taught many times during the 1980s and 1990s. In 1983 he asked to teach the beginning programming classes. He taught these courses in Fortran, Pascal, C, C++, and Java, and was a member of the Computer Science Interest Group in the Department of Mathematical Sciences as language changes were discussed and adopted. In the 1980s Berman began advising students who were in the computer science degree program. During the 1980s and 1990s Berman split his teaching equally between mathematics and computer science courses.

In 1998 the Department of Mathematical Sciences was split into two departments: computer science, and mathematics and statistics. Berman chose to enter the new Department of Computer Science Department. In later years he taught mainly the courses in data structures, programming languages, and computing and computer applications (for non-majors).

Besides teaching, Berman had a productive research program in combinatorial design theory, collaborating with mathematics faculty and students. He enjoyed attending and contributing to the Southeastern Conference in Combinatorics, Graph Theory, and Computing, held in Boca Raton, Florida, each March.

Berman and his wife plan to relocate to Northern Colorado where he plans to pursue outdoor activities and continue scholarly activities in mathematics and computer science.

David was presented with an iPad mini along with the department’s gratitude for his years of service.

Doctoral candidate Hua Li will join our department beginning fall 2013. She joins us from Carleton University in Ottawa, Canada where she conducted her doctoral work. She specializes in computer graphics, image processing and computer vision.

Her other research interests include digital halftoning, non-photorealistic rendering, tilings and patterns, GIS, terrain visualization and stereo graphics. She also holds engineering degrees (M. Eng., control engineering and B. Eng., mining engineering) from the University of Science and Technology, Beijing, China. Li will teach CSC 131 and CSC 220 in the fall.
Faculty Focus

Gur Adhar developed and taught for the first time a new course titled “Programming Massively Parallel Processors with CUDA-C (Computer Unified Device Architecture)” as a special topics course during spring semester 2013.

Ralph Bradley continued serving as the department’s industrial development officer coordinating the department’s advisory board and managing the internship program.


Sridhar Narayan, Gene Tagliarini, Shelby Morge, Mahnaz Moallem and Christopher Gordon received additional funding for their grant, “INCOME: Integrating Computing and Mathematics Education,” through NC QUEST / Quality Educators through Staff Development and Training across North Carolina as well as a Google grant for CS4HS (Computer Science for High School), Summer 2013.

Eric Patterson, Karl Ricanek and Amrutha Sethuram’s paper “An Improved Rendering Technique for Active-Appearance-Model-Based Automated Age Progression,” was accepted for a poster session at ACM SIGGRAPH, Anaheim, Calif., July 2013.


Karl Ricanek was awarded funding for the Central Intelligence Agency grant “Social Media as Big Data,” with Jeffery Cummings and Judith Gebauer and the grant “Diverse 3D Face Scan Collection,” from Oak Ridge National Laboratories. He also received continued funding with Ron Vetter and Amrutha Sethuram for the grant “CASIS FY 2013-2014,” from the Army Research Lab and was co-principal for the funded grant “UNCW Team for Interdisciplinary Global Research,” from the Defense Intelligence Agency with co-principals Jess Boersma, Herb Berg, Daniel Masters and C. Lisa Pollard.

Karl Ricanek also mentored four African-American young men...
Faculty Focus (continued from p. 3)

at Hoggard High School during their four years of attendance there. Each graduated in May and was accepted into a four-year college in the UNC system. One will major in computer science at UNCG. All of these young men are first-generation college attendees with bright futures thanks to Karl’s outreach efforts.

Devon Simmonds led a supervised research project titled “A Case Study in the Model-Driven Development of CorkBoard – a WebApp for Collaborative Work,” for CSC 450 students Andrew Harnage, Douglas Flagg and Amber Whittemore.

Gene Tagliarini and Sridhar Narayan presented “Hands-On STEM: Inquiry-Based Teaching in Science Technology Engineering and Mathematics” and “Using Squeak in the Classroom,” at UNCW’s WCE and CESTEM, March 2013. They also received additional funding, with Shelby Morge, Mahnaz Moallem and Christopher Gordon, for their grant, “INCOME: Integrating Computing and Mathematics Education,” through NC QUEST / Quality Educators through Staff Development and Training across North Carolina.

Jack Tompkins completed his second term as assistant chair and will return to teaching full time in the fall.


Congratulations to the following department members for being recognized by one or more graduating seniors as someone whose impact on them was significant during their undergraduate or graduate years:

Gur Adhar, David Berman, Ralph Bradley, Marni Ferner, Curry Guinn, Sridhar Narayan, Eric Patterson, Laurie Patterson, Karl Ricanek, Devon Simmonds, Gene Tagliarini and Ron Vetter.

Coming This Fall:

B.S. Information Technology

The Information Technology (IT) major is an interdisciplinary major shared by two departments: the Department of Computer Science and the Department of Information Systems and Operations Management. The two departments bring different strengths and perspectives to this unique major. This multi-disciplinary program leads to a B.S. degree in information technology (BSIT). See more at http://uncw.edu/bsit/index.html.
**Student Showcase**


**Eddie Dunn ’13** and **Curry Guinn** presented “Computational Methods for Determining the Similarity between Ancient Greek Manuscripts,” at the International Conference on Artificial Intelligence, July 2013.


**Kory Urban ’12** accepted an internship position at DryCASE.

**Justin Poliachik and Chris Hetem** accepted internship positions at Waverider Design, a local company that does mobile app and Web development nationally.

The following students completed their directed individual study (DIS) topics during the 2012-13 academic year:

- **Dan O’dor**: “Mobile Development with iOS: Carbon Trading,” **Eric Patterson**, advisor.
- **Thomas Lovette**: “Using Speech Recognition for Video Indexing,” **Curry Guinn** advisor.

The following students presented information about their internship experiences:

- **Kosta Blank** and **Brandon Lundquist** – Credit Suisse
- **Alan Linz** and **Ashley Nassar** – UNCW ITS
- **Risa Moore, Justin Poliachik, Brianna Lofton** – Corning
- **Zachary Tomkoski** – North Carolina Environmental and Natural Resources
- **William Erwin** – ATMC
- **Roger Johnson** – Tritech
- **Brian Walker** – SAS

**How Cool Is This?**

A group of fourteen CSC 421: computer gaming students and digital arts students attended the East Coast Game Conference (ECGC) in Raleigh, N.C. in April 2013 and also visited Epic Games and Redstorm-Ubisoft offices. Several of these students were invited back for beta-testing of the new game *Fortnite* in development at Epic Games in June 2013.
Sixteen new members were inducted into the local chapter of the international computer science honor society Upsilon Pi Epsilon for the 2012-13 academic year. Congratulations to Zachary Ambrose, Brianna Anthony, Nathan Asselstine, Kevin Boggs, Linda Dance, Domonique Dixon, Bryan Florkiewicz, Christopher Keller, Brett Kostern, Racheal Lenig, Sarah Martin, Christopher Mendenhall, Robert Millar, Paul Murray, Daniel Palmer and Anthony Sutton.

Upsilon Pi Epsilon, founded in 1967, is the only International Honor Society for the computing sciences. Over 120 institutions of higher education around the world have established UPE chapters to recognize scholarship and professionalism. UPE was officially recognized by the ACM in 1967 and the IEEE Computer Society in 1992. See more at [http://upe.acm.org/](http://upe.acm.org/).

Congratulations to Phillip Walker for receiving a scholarship award from Upsilon Pi Epsilon! This is the second year in a row that one of our students has won this award.

Congratulations to this year’s ACM president Jazmin Capezza, and the other ACM officers on the success of the grant proposal they submitted to NASA to pay the $6,000 registration fee for the FIRST Robotics team that the UNCW ACM Chapter organized and mentored. These grants were competitive, with a written application similar to what might be submitted to NSF; it was a substantial amount of work for them. Given the high registration fee, getting this grant meant the difference between being able to field a team and not fielding a team. Richard Chapman was an invaluable coach and mentor for the group. View more at [http://www.thewiredwizards.com/](http://www.thewiredwizards.com/).

Don’t miss the UNCW-ACM website: [http://student.uncw.edu/org/acm/](http://student.uncw.edu/org/acm/)
Awesome Accomplishments

Ron Vetter Selected as Interim Associate Provost for Research and Dean of the Graduate School

Vetter, who earned a Ph.D. in computer science at the University of Minnesota, came to UNCW in 1996 and from 2000-05 served as the first permanent chair of the newly created Department of Computer Science. During his tenure as chair, FTE faculty grew from 8 to 14, the new CIS building was designed, and a new interdisciplinary graduate program in computer science and information systems (CSIS) was developed and approved. From 2006-11 he served as director and graduate coordinator for that program, during which time enrollment grew from 20 to 51, the website was redesigned and numerous policies and procedures were developed. He also served on the Graduate Council from 2007-10. The author or co-author of over 100 conference, magazine and journal papers and primary or co-investigator on grants and contracts exceeding $5 million, he is the co-founder of Mobile Education LLC, a faculty-initiated technology startup company which has received three separate national awards for innovation in 2008, 2010 and 2012. Since 2011, he has served as editor-in-chief of IEEE Computer, the international flagship publication of the IEEE Computer Society. Vetter has a strong and proven record of collaboration with other units and departments having worked with many faculty and staff on a wide variety of projects – most recently promoting and supporting faculty technology development efforts across campus.

Cyber Defense Team Takes Second Place

The Cyber Defense Team is a combination of IS, CS and M.S. CSIS students. This outstanding performance is achieved by hard work, determination and excellent team dynamic of the following students:
Ashley Riley – team captain; Michael Abate – team co-captain; Mandy Soo; Juvens Isaac Gracieux; Ray Antonio Haddock; Daniel Wensch; Shady Aziz Mohamed; Dennis Christopher Burns and William Blevins. For three days, participating teams were given the task of securing several systems while they were bombarded with business threat injections and were under attack by hackers (the red team). Their scores were based on how they performed against the hacking attempts of the red team, how many services they had running and how they handled the business threat injections during the competition. They were given about one month’s worth of IT tasks for completion in a couple of days. The team prepared for this event relentlessly working and learning together completely outside of their full-time academic schedule. Each member spent an average of 15 hours per week for about two months preparing for this event. Advisors include Ulku Yaylaciegi, Ron Vetter and Matt Bohme (GE-Hitachi).

SECCDC was sponsored by: Department of Homeland Security, Deloitte, Dell Secure Works, Metasploit, NetScout, Core Security and HP. After the competition, our students were approached by these recruiters and were invited to apply to their cybersecurity positions!

The University of North Carolina Wilmington is now listed as a member of the Academic Alliance of NCWIT, the National Center for Women & Information Technology.
Alumni News

Bryan Batten ’06 is involved with an eBook subscription startup company called eReatah which hopes to launch in 2013.

Haeden Howland ’10 works for Concept Solutions (www.concept-solutions.com), a company based out of Reston, Va., with offices in Washington, D.C. and Atlantic City, N.J.

Philip Perry ’10 works at K2 Solutions (www.k2si.com) as the ISSO/IT administrative assistant.

Daniel Brinkley ’12 is the creative director at a local company called DryCASE - a manufacturer of waterproof vacuum sealed cases for smartphones and tablets. He has been a valuable resource for student internships.

Jordan Clifton ’12 was hired for a full-time position at Waverider Design and has also been a helpful connection for current-student internships.

Ashley Munday ’12 works for HCL America doing contract work for Symantec in Mountain View, Calif. HCL has locations all over the world including the RTP area.

Kevin Shea ’12 writes that he found a job at BlueToneMedia which is a website development firm in Wilmington.

Zach Wilson ’12 was hired as an SQL, .Net developer with the Wilmington-based software company AlphaCM.

Many UNCW Grads Pursue Advanced Digital Arts Degrees

Illia Ziamtsov ’11 has finished his first year in the graduate program in computer graphics at Purdue University.

Liam Glover ’11, Kara Gundersen ’11 and Alex Beatty ’11 are part-way through the M.F.A. in digital production arts at Clemson University, and several new students were accepted there as well this year. Kevin Boggs ’13, Chris Keller ’13 and Doug Rizeakos ’13 plan to begin fall 2013. Jenny Thompson ’13 was also accepted and is finalizing her plans.

Michael Hogan ’09 is nearing completion of his M.F.A. in computer animation at Savannah College of Art and Design (SCAD).

More Great Stuff

Kevin Boggs ’13 was awarded an internship this summer in the department of production services technology at the very competitive Sony Pictures Imageworks in Culver City, Calif. where films such as Hotel Transylvania and The Amazing Spiderman were made. Earning an internship directly in the visual-effects and animation industry is a first for a UNCW student. Congratulations, Kevin!

To be included in the next newsletter, please send an email to mferner@uncw.edu.
We welcome your recent professional and personal news!
Congratulations to Our Recent Graduates!

Fall 2012 Graduates
Master Degrees:


Zachary Wilson, “Prophet Explorer - A Full-Text Search MVC Application to Compare the Sayings of Religious Prophets,” Tom Janicki, advisor.


Jui (Ray) Sun, “An Investigation into Audio Conferencing on Smart Phones,” Ron Vetter, advisor.


Bachelor Degrees:

Benjamin James Beeman
Brook Thomas Bigford
Nathan Avery Brown
Scott Stephen Hall
Jeremy Lee Huffman
Cameron Reid Jackson
Thomas Donald Lovette
Brandon James Lundquist
Risa Marie Moore
Travis James Radtke
Robert Neil Smith and
Phillip Andrew Walker

Spring and Summer 2013 Graduates
Master’s Degrees:


Bachelor Degrees:

Kevin Andrew Boggs
Jesse Haywood Creech
Sean Lovell Dyer
William Christian Erwin Summa Cum Laude
Robert Trent Jernigan
Tiffany Brooke Jordan
Christopher Matthew Keller Magna Cum Laude
Brianna Janille Lofton
Darrell Adrian MacDonald
Ashley Annette Nassar
Daniel O'Dor Magna Cum Laude
Alexander Douglas Rizeakos Cum Laude
Nicholas Antonio Ruiz
Brennan Reese Smith Cum Laude
Jordan Maurice Stone
Tuan Trong Tran
Kory Vincent Urban and
Amber Rhianna Whittemore
Alumni and Friends:

Name: ___________________________________________  
Dr./Mr./Mrs./Ms.  
First  
Middle  
Maiden  
Last  
Suffix  

Home Address: ___________________________________  
Street/PO Box  
City  
State  
ZIP + 4  

Home Phone: ___________________________  
Cell Phone: ___________________________  
Work Phone: ___________________________  

Email: _________________________________________  

Graduation date: ___________________________  
Degree/Major: ___________________________________  
Spouse UNCW Graduate? Yes/No  

Employer: _________________________________________  
Position: _________________________________________  
Matching Gift Company? Yes/No  

Business Address: _____________________________  

Spouse: _________________________________________  
Dr./Mr./Mrs./Ms.  
First  
Middle  
Maiden  
Last  
Suffix  

Spouse’s Employer: _____________________________  
Position: _________________________________________  
Matching Gift Company? Yes/No  

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Enclosed is my gift of $__________ for the Computer Science Department Trust Fund (make checks payable to UNCW) or charge my ___Visa or ___Mastercard or ___American Express  

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Return to: Advancement Services, University of North Carolina Wilmington, 601 South College Road, Wilmington NC 28403-5905  
This gift qualifies as a charitable donation. THANK YOU for your consideration and generosity!

Visit us on the Web:  
www.uncw.edu/csc  

Also look for the UNCW computer science group on Facebook and on LinkedIn!

Calling All Alumni  
As a valued member of the Seahawk family, we want to learn more about the areas of the university that are most important to you. Our goal is to be able to provide you with information, news and events pertaining to your areas of special interest.  
Please take a moment to review your contact information and make any necessary changes by visiting, www.uncw.edu/alumniupdate.

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