The 2008-2009 period will long be remembered as a time when the stock market lost half its value, large multinationals teetered on the edge of bankruptcy, and the US economy suffered a meltdown. UNCW was not immune to these events, and spending restrictions, hiring freezes, and cutbacks dominated campus conversations. The good news is that, despite the adverse circumstances, the computer science department had another solid year that featured notable accomplishments from both students and faculty.

The Face Aging Group continued its impressive record of securing funding for its research activities from a diverse group of sponsors, including the Federal Bureau of Investigation. Their efforts have led to the creation of a program in Identity Sciences at UNCW.

The USeIT project, funded by a multi-year grant from the National Science Foundation, introduced modeling using Etoys software to students and teachers in many middle and high-school classrooms in New Hanover, Pender and Brunswick Counties. Now in its third year, the USeIT project has directly benefited 75 teachers and 150 student participants and indirectly engaged over 1,000 students in Southeastern North Carolina. Departmental research activities resulted in numerous publications and presentations that are detailed under Faculty Focus. This includes five publications which featured six student co-authors and presenters.

The department made headway in other areas as well. The department's proposal for an undergraduate major in Information Technology (IT) was approved by UNCW. The IT major mimics at the undergraduate level the successful partnership between the computer science department and the information systems and operations management department at the graduate level and is currently awaiting approval by UNC General Administration. The 2008-09 academic year also saw an increase in the number of directed independent studies, that allow motivated students to team up with dedicated faculty to craft a personal, often intense, learning experience.

Building on its legacy of service to the community, the computer science department offered a Squeak Etoys camp to middle-school students in June 2009. Following her tradition of actively supporting the department, former chair and associate professor emerita Dr. Barbara Greim sponsored several campers through a generous scholarship.

Looking forward, the 2009-10 academic year promises to be busy. Like computer science departments nationwide, our department is seeing a resurgence of interest in computer science. We plan to continue to refine the learning outcomes assessment process that we started last year. Among other things, the department plans to seek accreditation for its undergraduate computer science program, a significant undertaking by any measure. These are all indicators of a strong program, working hard to become stronger. As always, I invite you to be a part of this process in any way that you can.

Sridhar Narayan, Ph.D. professor & chair
Faculty Focus


David Berman’s paper “Brother Avoiding Round Robin Doubles Tournaments II” with Malcolm Greig and Douglas Smith will appear in Ars Combinatoria (July 2009).


Ron Vetter presented “Building Mobile Messaging Applications with SMS” an ACM Distinguished Lecture at Duke University in Durham, N.C. (February 2009). (See also p. 3)

Laurie Patterson, Ron Vetter, Tom Janicki and Brian Reinicke published “Majoring in a Virtual Environment: Merging CS and IS into IT” in the proceedings of the 2009 World Congress in Computer Science, Computer Engineering, and Applied Computing.

Sridhar Narayan and Gene Tagliarini were co-authors on three papers which were accepted at the Society for Information Technology and Teacher Education’s 20th International Conference, in Charleston, S.C.: “Integrating the Vernier LabPro™ with Squeak Etoys”, “Creating Virtual Laboratories Using Squeak Etoys” and “STEM Learning in Middle School with Games and Simulations.”

Gene Tagliarini also co-authored “ITEST-Student Created Games and Simulations Panel”, which was presented at the same conference.

Karl Ricanek presented “The Changing Face: Developing a Diachronic Biometric for the Visible Face Modality” at the University of Maryland Department of Computer Science in College Park, Md. and "Review of Facial Aging" at the IEEE 1st International Workshop on Robust Biometrics in Honolulu, Hawaii.

Eric Patterson presented “Dynamic Expression Recognition for Biometric Identification and Behavior Profiling” at the IEEE 1st International Workshop on Robust Biometrics in Honolulu, Hawaii.


Devon Simmons presented “In Support of an Aspect Oriented Approach to Migrating Distributed Applications” at the Caribbean Conference on Information and Communications Technology (CCICT) at the Caribbean Academy of Sciences in Kingston, Jamaica.


Special congratulations for the following accomplishments:

Sridhar Narayan was reappointed to a second four-year term as computer science department chair.

Karl Ricanek, Eric Patterson and Midori Albert (Anthropology) were awarded $335,665 for their proposed project “Center for Academic Studies in Identity Sciences.”

Karl Ricanek and the UNCW Face Aging Group were awarded over $500,000 in grant money this year.

Clayton Ferner and Barry Wilkinson received $149,924 for their NSF Grant "Collaborative Research: Enhancing Teaching of Grid Computing to Undergraduate Students by using a Workflow Editor."

Laurie Patterson received funding from FRIENDS of UNCW in the amount of $1,756 to purchase an Epson Stylus Pro 9600 Series printer which is capable of printing posters.
**Squeak Etoys Camp**

Jack Tompkins led another popular and successful summer camp during June 2009. What does Etoys teach?

**Computer Fluency**

Most schools teach "computer literacy," although this rarely amounts to more than word processing, web browsing, and simple presentations.

Etoys enables genuine computer fluency, allowing students to both read and write the language of the computer.

Scripting requires children to break problems down and make solutions explicit. Results are obvious and immediate, which encourages discovery.

**Sketching and Scripting**

With Etoys, children can draw their own sketches then bring them to life by writing "scripts" that tell the sketches what to do. Children can then put sketches and text in digital books with multiple pages, allowing them to create interactive stories to share with the world.

**Powerful Built-In Tools**

With Etoys, children can explore powerful built-in tools such as the sound analyzers shown above. Children can then design their own guitar tuners and explore the multiple dimensions of our surrounding world. Go to squeakland.org for more information.
Awesome Alumni

Wesley Williams and Beth Snead presented "Integrating the Vernier LabPro™ with Squeak Etoys", co-authored by Daniel Heywood ‘08, Gene Tagliarini, Sridhar Narayan, Shelby Morge and Karen Hill at the Society for Information Technology and Teacher Education 20th International Conference, Charleston, S.C. Philip Whisenhunt and Ricardo Valeo participated in the fourth annual CSURF showcase for undergraduate research. Heather Jenkins, David Anderson, Hogan Hagy and Haeden Howland all completed internships this year. Kyle Holt attended a summer school program on multicore programming at the University of Illinois’ Universal Parallel Computing Research Center. The following students completed their respective DIS programs:


Jason Vandeveuter, Ben Barbour, Lyle Scott, Will Wharton and Keith Haertel attended the ACM Southeast Conference at Clemson last March.

Student Showcase

Computer Science Students’ Accomplishments

Alle Rawls MSCIS ’08 will attend Clemson’s Ph.D. program beginning fall ‘09. Congratulations, Allen!

Miss Seaman ’03 works for Sageworks, Inc., a financial analysis software company in Raleigh, N.C.

Jarod Rodriguez ’95 is a technology account manager for GlaxoSmithKline and is involved in their NetApp.com project.

UNCW’s Face Aging Group Gains Publicity

Face recognition (FR) research and technologies focus largely on capabilities of computer algorithms to match stored, gallery images to digital images acquired from video sequences or still images for use in security and law enforcement venues. These algorithms try to reverse-engineer the innate human ability to recognize a familiar human face. However, one major aspect of this technology that has yet to be thoroughly explored is the effects of age-related craniofacial morphologic changes using the accuracy and reliability of FR technologies.

UNCW’s Face Aging Group, led by Karl Ricanek and Eric Patterson, have developed models to age adult images up to 70 years old. Their solution is also capable of de-aging a person’s photo. The models developed follow the natural morphological process of the craniofacial complex. This group partners with biometric researchers from Carnegie Mellon University, Clemson University and North Carolina A&T State University to form an IARPA sponsored Center for Advanced Studies in Identity Sciences (CASIS). They have been featured on MSNBC: “Lying About Your Age? A Computer Can Tell” (http://tinyurl.com/mqt2qg) and on WECT’s news broadcasts (http://tinyurl.com/n7e76x).

A summer 2008 survey, conducted by the National Association of Colleges and Employers (NACE), of new college graduates found that Computer Science majors earn the second highest starting salaries behind Chemical Engineering.
community, such as the ability to request and retrieve a grade, campus event calendar listings, dining and retail coupons, shuttle bus locations, and more.

The mobile challenge was established to identify innovative and creative mobile applications that enhance academic performance, build campus community and help improve campus security operations.

Vetter said "Winning this award is exciting because it demonstrates that innovative technology developments are happening at UNCW and that those developments are on par with efforts across the country."

On a broader scale, Mobile Education, LLC develops innovative, real-time, two-way short message service (SMS) based applications. Their primary goal is to provide clients with the capability to send and receive a wide range of mobile phone information services using bi-directional text messages via common short codes using readily available cell phone and cellular network technologies. Several computer science students have been given access to Mobile Education’s computing platform in order to develop text message applications as part of their undergraduate and graduate studies. Shaun Border and Wade Grant each developed an interface to Microsoft's Outlook Mobile Service (one was .NET based and the other Java based) which enables email to be sent via text message and text messages to be sent back into the email system. Bill Shipman developed an anonymous tip system whereby users could text tips to the campus police department.

This type of student access to Mobile Education’s servers has been, and will continue to be, a win-win situation for both this new faculty startup company and the UNCW community alike.

Web sites:

Mobile Education LLC – http://myMobEd.com
UNCW Mobile Services – http://www.uncw.edu/mobile
Dub Hunt – http://DubHunt.com
Mobile Coupons – http://CouponsToYourPhone.com

Don’t miss the newly revised UNCW-ACM Web site: http://student.uncw.edu/org/acm/
Upsilon Pi Epsilon’s three officers for 2008-09 (pictured at left) inducted 14 new students into the local chapter of the international computer science honor society.

Congratulations to Sean Garmon, Wesley Williams, Ashley Vereyken, Kyle Snell, Sarah Peck, Matthew Mascherin, Haeden Howland, Hogan Hagy, Justin Denning, Christopher Cotton, Maziar Boddoohi, Brian Bullard, Patricia Best and Amil Abdallah (all pictured below.)

Gur Saran Adhar spent a month during summer 2008 in Germany with scholars at Kiel University in a study of randomized parallel algorithms to solve intractable problems in computer science.

Jack Tompkins led another successful summer Squeak Etoys camp. (See p. 3 for details.)

2009 Award Recipients

Casey Tucker
Computer Science Chairs Scholarship

Elizabeth Snead
Fletcher R. Norris Scholarship

Wesley Williams
David Bristol Scholarship

Camilio Alvarez
Bookstore/Textbook Scholarship

Patricia Best
Bookstore/Textbook Scholarship

Faculty Trivia:

Did You Know That?

1) Who was the headline, “Nerd Wins Kayak Race,” referring to regarding a first place finish in the 5th Annual Wrightsville Beach Sea Kayak 3-mile Fun Race, November 2008?

2) Can you spot a member of the faculty at the Stop Hunger Now event last fall in the photo at the right?

3) What special skill does Dr. Vetter have?
   A) Riding a unicycle
   B) Juggling (with fire!)
   C) Walking on six-foot stilts
   D) All of the above

4) Which faculty member can be spotted riding an '02 VRod with a snake skin seat, Screamin' Eagle pipes and a high performance intake?

Trivia answers:

1) Curry Guinn 2) Karl Ricanek 3) D 4) Jack Tompkins

Congratulations to Our Recent Graduates!

Fall 2008 Graduates
Master’s Degrees: Kevin Daniel Matthews, William John Shipman, Steven Barry Sutton
Bachelor’s Degrees: Jaewoong Kim (cum laude), Brent Saylor Kleinert, William Larry Peeden (magna cum laude), Jordan Edward Pike, Melea Lann Williams.

Spring and Summer 2009 Graduates
Master’s Degrees: Michael Parker Moran, Sarah Elizabeth Peck.
Bachelor’s Degrees: Teresa Nurit Freitas, Clarence Wade Grant, Michael James Haizlip (magna cum laude), Heather Renee Jenkins (cum laude), Michael Charles Last, Sean Faust Teare, Derek Allyn Wilson, Herbert C. Bland, Matthew T. Miller.
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: ______________

E-Mail __________________________________________

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

Visit our secure online giving site: http://www.uncw.edu/giveonline to make a gift to the Computer Science Department Trust Fund.

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

Number: ___________________________  Expiration Date (mm/yyyy) ______  3-digit Security Code_____

Name as appears on card: __________________________________________

Signature: __________________________________________

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!

Calling All Alumni

What are you doing now? Where are you living? Please send us news about yourself so that we may include it in the next newsletter! Professional and personal information is welcome. Send e-mail to mferner@uncw.edu, or update your alumni information here.

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