Welcome to all new and returning CSRC members for the 2009/2010 academic year. The 2008/2009 academic year brought many changes to our department, including a new department head in Dr. Barbara Ryder, the opening of our new Undergraduate Learning Center, and the introduction of several new courses into our undergraduate curriculum. During 2008/9, we made the first awards from the Investment in Excellence Scholarship Fund, which was endowed from CSRC funds.

In addition to seeing our undergraduate numbers start going in a positive direction, we also had the largest number of scholarship applications since joining the College of Engineering in the summer of 2003.

Although the economy has had a negative affect on many aspects of business and hiring, our students were pleased with the amount and quality of internship, co-op, and full-time offers they received this year. We received very good feedback from our majors and interested GE students about the CSRC career events. They really do appreciate the opportunity to interact with each of you; seeing you here several times a year keeps your company in their minds.

Thanks go to Duke Energy and Lockheed Martin, who were the first premier members to join us for a company day in the Undergraduate Learning Center. We hope to see more of our premier members here in our facilities during the fall semester.

We are looking forward to a new event in October of this year. Please see the article on page 6 for more information.

I look forward to working with all of you during the 2009/10 academic year.

Libby G. Bradford
Director, CSRC

CSRC Starts New Program with CS Student Groups

Beginning with the spring 2009 semester, the CSRC started a proactive approach to funding all of our student groups. Although the CSRC had helped with projects and events in the past as requested, we are now working with all CS student groups to make sure that funding needs are known. All six CS student organizations (ACM, AWC, CS^2, UPE, VTGP and Grad Council) now receive base funding from the CSRC for yearly meeting expenses as well as having special events and projects covered by the CSRC through a proposal process. Needs not met through CSRC funding are listed on the Designated Sponsorship List (DSL). For more on the DSL, please see page 2.
Designated Sponsorship List

The Designated Sponsorship List, introduced in Spring 2009, has already been a success in helping to fund our student activities.

- Lockheed Martin has provided funding for student travel, scholarship funds, and plans to be the secondary sponsor of the next ACM High School Programming Competition.
  - High Performance Technologies, Inc. (HPTi) has provided a scholarship for the 2009/2010 academic year.
- Bloomberg has provided support for student travel and has covered the entrance fees for our ACM teams to the regional programming competition for this year.
- NetApp has provided a scholarship for the 2009/2010 academic year.
- Google was the secondary sponsor of the AWC’s Women in Computing Day 2009. The CSRC was primary sponsor for this event.
- 2007/2008 CSRC member Cisco provided scholarship funds for members of AWC.
- For more information on how you can support our students and become a featured sponsor of DSL items, please see www.cs.vt.edu/partnering/dsl

Upsilon Pi Epsilon Inducts New Members

On Thursday, April 9, 2009, Upsilon Pi Epsilon (UPE) inducted one of its largest groups of initiates in recent memory. Twenty-one students were inducted for the 2008/9 academic year. Upsilon Pi Epsilon (UPE) is the first and only international honor society for the computing sciences. The UPE Alpha Chapter of Virginia was chartered at Virginia Tech in 1975. The CSRC is proud to have provided $1000 towards subsidizing the membership fees.

Women in Computing Day

On April 17, 2009, the Association for Women in Computing (AWC) held its annual Women in Computing Day. This event, in its 11th year, invites middle school girls to campus to learn about computing and technology. This year, the 100+ middle school students took part in four sessions:
  - Novel interactions involving tabletop displays
- Exploring Chaos with Computers
- Robotics
- Virtual Environments and Gigapixel
The CSRC is proud to have been the primary sponsor of this event. Thanks to Google for providing secondary sponsorship. Special thanks to IBM for sending Ms. Dibbe Edwards. Ms. Edwards was the keynote speaker for this year’s event.
CSRC and CS Department Sponsor Grace Hopper Conference

For the second straight year, the CS Department and the CSRC will be academic underwriters of the annual Grace Hopper Celebration of Women.

Last year, the CS Department was well represented by eleven undergraduate and graduate students who attended the conference.

In addition to receiving several scholarships for conference attendance, the Bronze underwriter status gave the department access to the Grace Hopper resume database and provided an exhibit table. The exhibit table was staffed by our CS majors, who had many opportunities to speak with other GHC attendees. The CS Graduate Program and Research Experience for Undergraduates (REU) were featured.

AWC members hope to match or increase the number of attendees at this year’s Grace Hopper Conference.

Special thanks to CSRC members Lockheed Martin and Bloomberg for their DSL support of student travel which will go towards this year’s Grace Hopper travel expenses.

CSRC Sponsors C-Tech² Etiquette Dinner

Last summer, the CSRC had the opportunity to sponsor an etiquette dinner for the women of C-Tech². C-Tech² is a pre-college program offered through the Center for the Enhancement of Engineering Diversity (CEED). C-Tech² is a two week camp for rising juniors and seniors, who spend their time at VT learning about engineering and technology.

The CSRC is proud to sponsor the etiquette dinner again for the 2009 campers.

According to Whitney Edmister, Assistant Director of CEED, “of the 20 seniors, all currently plan to pursue an engineering or a STEM field at the post secondary level.”

AWC members hope to match or increase the number of attendees at this year’s Grace Hopper Conference.

Special thanks to CSRC members Lockheed Martin and Bloomberg for their DSL support of student travel which will go towards this year’s Grace Hopper travel expenses.

CSRC Helps Sponsor Research Experience for Undergraduates

This summer, 25 students are participating in the REU program at Virginia Tech. According to the REU website, this program provides “undergraduate students from various universities with the opportunity to spend eight weeks at Tech, working with our faculty and graduate students on research projects using the state-of-the-art technology and laboratories assembled here.”

This year’s participants include students from Wellesley College, Connecticut College, U of Virginia, U of Puerto Rico Mayaguez, Norfolk State University, Carnegie Mellon, Penn State-Altoona, U of Rochester, Lafayette College, U of Rutgers, and Virginia Tech. According to Dr. Scott McCrickard, “the NSF-sponsored REU and BPC programs encourage students (particularly those in underrepresented groups) to consider graduate school and a career in research and the professoriate.”

The CSRC is proud to have helped sponsor activities and meals for the REU group.
Virginia Tech Undergraduate Research in Computer Science (VTURCS)

The annual VTURCS Spring Research Symposium was held on Thursday, April 30th. This year, VTURCS had 15 participants from 9 different projects.

Although it was a difficult decision, industry judges made awards to the following students and projects:

First place: “Isosurface Volume Rendering of Time Dependent Data Sets” by Colin Braley and Robert Hagan

Second place: “Improving Exception Messages with Exception Doctor” by Michael Woods

Third place: “Affinity Diagramming Goes Digital” by Luis Rivera, Andrew Forsman and Stephen Probus

The Department would like to thank the CSRC for providing assistance in judging and giveaways. Giveaways were provided by Bloomberg, Fidelity, Google, IBM, Lockheed Martin, Mailtrust, Meridium, MicroStrategy and Vanguard. Industry judges included representatives from Meridium, Mailtrust, IBM and Lockheed Martin.

CS Student Wins C.T. Tate Distinguished Senior Co-Op Award

On Tuesday, May 5, 2009, CS Senior Jennifer Kammer was awarded the C. T. Tate Distinguished Senior Co-op Award by Career Services. This award is open to students across the university and is based on a co-op employer nomination. According to Dr. Cal Ribbens, "In addition to her great co-op experience, Jenny has contributed in a remarkable number of ways to student organizations and to our department in general. She was an excellent undergraduate teaching assistant; she often went the extra mile to make sure students understood the material." Jenny is a member of Upsilon Pi Epsilon, Phi Kappa Phi and Phi Beta Kappa Honor Societies. She has also held several leadership positions with the Association of Women in Computing.

Congratulations to Jenny!

Phi Beta Kappa Inductions

Nine undergraduate Computer Science majors accepted an invitation to join the prestigious honor society Phi Beta Kappa this spring. According to the www.pbk.org, Phi Beta Kappa was founded at the College of William and Mary in 1776 and is "the nation's oldest and most widely known academic honor society." Phi Beta Kappa celebrates and advocates excellence in the liberal arts and sciences. CS majors achieving this recognition of academic excellence were Jacqueline Addesa, Jeffrey Brabant, John Edstrom, Jenny Kammer, Aaron Lindsay, Gaurav Raja, Benjamin Reid, Andrew Street, and Ramesh Srigiriraju.
Dr. Ali Butt and Dr. Naren Ramakrishnan Recognized

“Eighty-eight of the nation’s brightest young engineers have been selected to take part in the National Academy of Engineering’s (NAE) 15th annual U.S. Frontiers of Engineering symposium. Ali Butt, assistant professor of computer science at Virginia Tech, is one.

His colleague, Naren Ramakrishnan, also a professor of CS at Virginia Tech, is one of the organizers of this year’s events. He was recently named an award recipient in HP’s 2009 Innovation Research Program and, in 2007, one of Computerworld’s 40 innovative information technology people to watch under the age of 40.

Engineers ages 30 to 45 who are performing exceptional engineering re- search and technical work in a variety of disciplines will come together for the 2-1/2-day event. The participants — from industry, academia, and government — are nominated by fellow engineers or organizations and chosen from approximately 240 applicants.

Butt is a 2008 National Science Foundation Faculty Early Career Development (CAREER) award recipient for his research in high performance storage systems. The goal of his research is to address the increasing performance gap between computing power and storage technology, especially for high performance computing (HPC) environments.”

Article by Lynn Nystrom

Dr. Ali Butt

Two Faculty Members Honored by College of Engineering

The Computer Science Department is proud to announce that two faculty members, Dr. Ali Butt and Dr. Adrian Sandu, were honored with a College of Engineering Faculty Award at the twelfth annual engineering faculty reception.

Dr. Ali Butt was the recipient of an Outstanding New Assistant Professor award. Ali joined the Computer Science Department in 2006 and is a member of the High-end Computing Systems and Network Research Group. He is also an NSF CAREER Award recipient for developing innovative storage techniques for emerging peta-scale computing platforms.

Dr. Adrian Sandu, an Associate Professor with the Computer Science Department, was named an Engineering Faculty Fellow. This award carries a $5,000 account for three years to be used to support research. Adrian has several ongoing research projects, one of which is an NSF CAREER award to develop computational methods for the new generation of air quality models. The majority of Adrian’s research funding comes from highly competitive federal agencies like NSF, NASA, NOAA, and NIH.

Dr. Godmar Back wins NSF CAREER Award for Cloud Computing

“Godmar Back, an assistant professor of computer science at Virginia Tech’s College of Engineering, has won a $419,000 National Science Foundation (NSF) Faculty Early Career Development (CAREER) award to create advanced execution environments for next-generation cloud applications.

Computers users during the next few years likely will shift from traditional desktop/server applications to a model dominated by Web-based application delivery, utility computing, software as a service, data mash-ups, and client-side extensions for Web customization. Back’s research project will create advanced Web browser and server execution environments that address the needs of these applications, which include multiple, interconnected components from varying sources.

An educational component will emphasize real-world contexts for student assignments in the computer science department. This effort is intended to boost recruitment and retention of women into the department, who research has shown see computer science more so than men as an enabling tool for advances in other fields.”

Article by Steven McKay
September Events—September 14, 15, and 16

CSRC Fall Luncheon
Monday, September 14
11:00 a.m.—1:00 p.m.

The CSRC Luncheon will be held in the Owens Ballroom on campus. To assist with parking, the CSRC will be providing a shuttle service from one of the outer parking lots. Additional information will be provided with your packet in early September.

Prior to the luncheon, we have added some informal mingling time for representatives attending the luncheon and all invited students. This will allow you time to circulate amongst all students attending, prior to sitting down for lunch at your table.

CSRC Career Reception
Monday, September 14
4:00 to 7:00 p.m.

The CSRC Career Reception will be held in Owens Banquet Hall. The CSRC Career Reception is a career fair for all undergraduate and graduate CS students. We also invite all students on our CS-Interest listserv which includes interested new freshmen in General Engineering.

Panel Speaking Opportunities
(Premier Members only)

We have opportunities for our premier members to be on panels for three different audiences:

- CS 3604 Professionalism Class
  Tuesday, Sept 15 9:30 to 10:45 a.m.
  Wednesday, Sept 16 9:05 to 9:55 a.m.
  Juniors and seniors in CS. Students are invited to ask representatives topics about their companies, job searching, and the job market.

- CS 4944 Senior Seminar
  Tuesday, Sept 15 5:00 to 5:50 p.m.
  These graduating seniors are moving on to positions in industry or to grad school. Topics include transitioning to the workplace and career management.
  Hypatia/Galileo
  Tuesday, Sept 15 7:00 to 7:50 p.m.
  Our representatives are invited to speak with students in the Hypatia and Galileo learning communities. You have the opportunity to give career advice and talk a bit about CS as a profession.

Dinner with CS Faculty—Tuesday, September 15

Dinner with CS Faculty
Tuesday, September 15
6:00 to 7:30 p.m.

It has become a CSRC tradition to have faculty join us for dinner on the Tuesday evening of the CSRC events. This year, we invite you to join us for dinner in 655 McBryde. This dinner is at 6:00 p.m., between the CS 4944 Senior Seminar Panel and the Hypatia/Galileo panel. CS faculty will be invited to attend to meet each of you.

October Events—October 18 and 19

CS Department Picnic
October 18, Ag Quad, 2:00 to 6:00 p.m.

For the third year, the CSRC will sponsor the CS Department picnic. The picnic will be on the Sunday preceding our new event, a panel and reception for newly admitted majors and new freshmen in General Engineering.

The picnic will be held in the Ag Quad (behind Sandy, Price, Hutcheson, Smyth, Saunders and Seitz Halls) and on the lower end of the drill field.

New CSRC Panel opportunity
Owens Banquet Hall, 7:00 to 9:00 p.m.
October 19

Per a request from several different CSRC representatives, we are adding another panel for the fall semester. This panel will be advertised to new CS majors, early in their academic careers, and the new freshmen in General Engineering. The panel is called “What I Wish I Knew as a Freshman.”

The panel will give each company representative a few minutes for an introduction and an opportunity to impart some academic, job seeking and career advice. The floor will be opened for questions, with time for students to mix and mingle with representatives afterwards.