In February, the Computer Science department moved into new digs on the third floor of Maria Sanford Hall. The new suite houses nine faculty offices, a reception area and a student work area; all very elegant, spacious, and private! We acknowledge this major institutional investment in the department and wish to express our gratitude and appreciation to all involved in making this a reality.

Our new home has brought the department together from our once scattered offices along the second floor hallway. The new design encourages impromptu hallway meetings (often where our most important business is accomplished!), as well as spontaneous brainstorming sessions. We are enjoying a new sense of connection, quick and easy access to one another, and most importantly, a more cohesive sense of community.

This is a great place to think, create, discuss, grade, and otherwise do the professor thing. We welcome you to come up any time, no invitation necessary! It can be lonely at the top so come check us out and enjoy the space with us. Just think, if you plan to major in Computer Science you’ll be able to share this space even more often!

CS@CCSU web site gets major facelift

The old web site of CCSU Computer Science Department has passed away peacefully. It faithfully served the department for waaaaay too many years and will be sorely missed. We grieved profusely over many sleepless days and nights. Finally, it was time to get a replacement, but we couldn’t find anyone to design a web site as unique, well-crafted and stylish as the old one. So we had to settle for a cheap imitation, which is exactly what you see now. Please check out our new site at: http://www.cs.ccsu.edu/index.html
Photos from Ribbon Cutting Ceremony

Left: New Faculty Offices; Right: View from several faculty offices.

New Face!

A ribbon cutting ceremony was held on February 15, 2007. Pictured above left to right are: Daniel Moran, Associate Chief Administrative Officer, Professor Neli Zlatareva; Neva Deutsch, Secretary; Professor Stan Kurkovsky; Professor and Computer Science Chair, Joan Calvert; CCSU President, Jack Miller; Professor Irena Pevac; and CS Graduate Assistant, Bharti Jogi.

Photos by Bob Wessman, CCSU Photographer

Computer Science Staff: Left to right—Neva Deutsch, Secretary; Professors Neli Zlatareva, Irena Pevac, Stan Kurkovsky, Brian O’Connell; seated—Professor and Department Chair, Joan Calvert

Dan Moran and President Jack Miller check out the new offices.
Scholarships in Computer Science, Mathematics, and Physics

Starting in the Fall of 2007, Central Connecticut State University will begin offering scholarships to qualified students enrolled in Computer Science, Mathematics, and Physics (CSMP) programs. These scholarships are funded through the National Science Foundation program Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM), award DUE-0630953. CCSU scholarship program was selected for funding from nearly 400 proposals. Funding for this grant demonstrates the quality of CSMP programs at CCSU.

Over the next four years, our program will award at least 20 scholarships annually. Qualified students majoring in computer science, mathematics or physics will receive up to $5,200 per academic year. Each scholarship can be renewed for the subsequent year - therefore, qualified students can receive nearly $21,000 over four years through this program.

Our CSMP scholarship program has a number of special features designed to help students receiving the scholarship succeed in their studies and prepare them for entering high tech employment fields or a graduate school upon graduation. These features include:

- Individual mentoring and advising by dedicated faculty; specialized tutoring; peer mentoring; participation in research projects; field trips.
- Scholarship Eligibility Criteria
  These criteria must be met by new applicants for a CSMP scholarship as well as by those students whose scholarship is being renewed for the subsequent semester. An eligible student must:
  - Be a United States citizen, a national of the United States, an alien admitted as a refugee, or an alien lawfully admitted to the United States for permanent residence;
  - Be enrolled full time in or accepted to one of CSMP academic programs:
    - **Computer Science**:
      - BS is CS, Honors
      - BS in CS, Alternative
    - **Mathematics**:
      - BA in Mathematics
      - BA in Mathematics with Specialization in Actuarial Sciences
      - BA in Mathematics with Specialization in Statistics
      - BS in Mathematics, BS (Certifiable for secondary teaching)
    - **Physics**:
      - BS in Physics
      - BS in Physics (Certifiable for secondary teaching)
  - Demonstrate academic talent or potential.
  - Demonstrate financial need

Useful Links:
- National Science Foundation
  http://www.nsf.gov/
- S-STEM Program
  http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5257
- Official Award Information
  http://www.nsf.gov/awardsearch/
- ShowAward.do?
  AwardNumber=0630953

CCSU Links:
- CS: http://www.cs.ccsu.edu/
- Math: http://www.math.ccsu.edu/
- Physics: http://www.physics.ccsu.edu/
- Admissions: http://www.ccsu.edu/admission/default.htm
- Financial Aid:
  http://www.ccsu.edu/FinAid/default.htm

Underrepresented minorities and female students are strongly encouraged to apply.

Tunxis-CCSU Articulation Agreement

Licensure and Accreditation of a program in Honors Computer Science/Mathematics, leading to the Associate of Science (A.S.) degree. We are pleased to announce that the Tunxis-CCSU articulation agreement was unanimously approved by the Advisory Committee on Accreditation of the CT Board of Governors for Higher Education on March 23, 2007. This means that students graduating with an Associate degree from Tunxis, having followed the course of study for computer science, will be able to transfer directly into our B.S. Computer Science Honors program as third year students. We have worked in close collaboration with Dean Keyes and Professor Adolfson at Tunxis so that all credits will transfer into our program with no bridge courses needed to be taken here. Student interest is growing and we anticipate our first cohort of Tunxis students to be coming to us during the academic year 2008-9 or perhaps sooner!
ACM International Collegiate Programming
Dr. Irena Pevac and Will Klein

On October 14, 2006, the Computer Science department sent three undergraduate students to represent our university at the very competitive ACM International Collegiate Programming Contest. The team advisor was Dr. Irena Pevac. We entered into the first stage of a two-tier regional contest for Northeast North America (eastern Canada, New England, NY state), contending with the likes of Harvard, Simon’s Rock, and SCSU. Of twelve teams representing nine schools, only the top two teams would advance to the regional finals. The CCSU team did phenomenal. We started in fourth place after Will Klein solved the first problem, but then dropped to fifth place even as he solved our second problem. Andrew Sotzing cracked the third problem and submitted a very elegant solution, but they still lagged behind Westfield State and Simon’s Rock, who also had three problems solved. In the last hour AJ DeCusati solved the fourth problem out of the seven and moved our team back up to fourth place, where they finished. As a college, we placed fourth, behind Harvard, Southern (SCSU), and Simon’s Rock. As a team, we placed fifth, behind those same schools plus a second team from Harvard. This is a very successful finish for CCSU. There was an amazing amount of teamwork in all of our solutions. For example, our fourth problem was solved by AJ, but Will wrote a section of code for AJ to build in, which in turn leveraged one of AJ’s other methods. In such a short time our team developed a strong level of synergy not seen in prior years. What made our performance remarkable is the limited amount of preparation we had. Andrew, AJ, and Will are all very busy people and they could only dedicate a few hours together, with almost no practice on their own. Other teams at this event practice frequently and top finishers like Harvard employ severe amounts of dedication. Ultimately, the high level of academics in our Computer Science program was preparation enough, and teamwork cemented our competitive edge. We more than doubled our performance over our two previous appearances at this contest and we are very thankful for the support of our professors and our peers. Congratulations goes out to both Harvard teams, Simon’s Rock, and especially SCSU, our sister school in CT. Our two CT teams were quick to befriend each other and we are very happy to see SCSU advance to the regional finals. We also applaud the other schools represented (in their order of finishing): Westfield State, University of Bridgeport, Plymouth State, UConn, and Siena. A celebration was held on November 30, 2006 to congratulate our team and discuss future competitions. There was much excitement and discussion, from our team and faculty, about this and future competitions.

Will Klein is a CCSU Computer Science Undergraduate student.
Jobs Queue
Wondering What You Can Do With Your CS Degree?

Job Title: Software Development Engineer on our Identity Management Team

Description: Lenel Systems International Inc., a United Technologies Company and a leading provider of software security solutions, seeks a motivated candidate to join our software engineering department. The Software Development Engineer is responsible for the creation, enhancement, development, and maintenance of software solutions that will shape the future of the security industry. Interaction with Quality Assurance, Tech Support, Documentation, Training, and Product Management will be required on a periodic basis. Primary responsibilities will be developing Windows based applications for credential management. This includes working with biometric devices, printers, smartcard technologies and other credential related devices. The successful candidate will:
- Create and implement software design specifications
- Utilize the latest C# / C++ / JavaScript techniques in code development
- Produce software documentation and functional test specifications
- Participate in the full life cycle of development from specification and design through implementation, testing and support.
- Must be prepared to work in a fast-paced environment, meet deadlines, and stay on top of current technologies.

Education: Bachelor of Science or higher in Computer Science or Software Engineering

Experience/Desired Skills:

Job Title: Team Member

Description: Responsibilities include working with a team of real-time software engineers, charged with providing and supporting real-time Linux solutions for propulsion system simulators, rig stand control systems, engine test stand control and data acquisition systems. Also includes working with data system operators, test engineers, performance engineers and controls engineers to understand and document test system software requirements, developing software designs and program code to implement the requirements, and producing and executing verification tests to demonstrate compliance to the requirements. Also, operational support of the software product in the field is required, including answering trouble calls, troubleshooting system problems on the test stands and bench facilities, and providing solutions to keep engine/component tests on schedule and meeting objectives.

Education: Bachelor of Science in Engineering or Computer Science.

Experience: Strong programming skills in C (or C++), software development in a Linux environment, Linux system administration, basic understanding of real-time operating system concepts (RTLinux a plus), kernel and/or user level drivers to VME and/or PCI hardware. Networking and various other communication protocols (Arinc, 1553, Firewire, CAN, AFDX, ...) a plus. Also any GUI experience with Java or GTK a plus.
Job Title: Team Member—ESCG

Description: This is a team ESCG position with Hamilton Sundstrand. Individual will work on team of analysts that support simulation operations for the Systems Engineering Simulator (SES) at JSC. Individual will provide scheduling and analysis support for the simulators in the SES laboratory. Assist with testing of simulations used for on-orbit crew training and engineering analysis. Perform basic fault isolation analysis using troubleshooting skills. Daily tasks may require the following skills: interpersonal communication, web development, database, technical writing, critical thinking, and planning. Candidate should be familiar with Microsoft Windows operating system/application and Linux operating systems. Must have the ability to work with a team to find solutions and the ability to work alone; must possess organizational skills, problem solving skills, and demonstrate personal drive. May perform other tasks as required.

Education: Typically requires a BS in CIS, CS or relevant discipline from an accredited university

Experience: Should possess up to 5 years experience in degree field or aerospace industry; new graduates encouraged to apply. Must have sufficient computer skills to perform assignments with a reasonable degree of independence under normal supervision. Must meet eligibility requirements to receive and maintain a DoD security clearance. Management has the prerogative to select at any level for which this position has been advertised.

Job Title: Software Development Engineer on our Database Team

Description: Lenel Systems International Inc., a United Technologies Company and a leading provider of software security solutions, seeks a motivated candidate to join our software engineering department. The Software Development Engineer will design and develop enterprise level applications with a focus on the database infrastructure. Interaction with Quality Assurance, Tech Support, Documentation, Training, and Product Management teams will be required on a periodic basis. Primary responsibilities will be managing product database schema for our flagship enterprise products and creating as well as maintaining product reports. Other responsibilities will include developing tools to assist our production environment, debugging and maintaining existing framework code. This includes requirements gathering, design, implementation, testing, and writing API documentation. Candidate must be prepared to work in a fast-paced environment, meet deadlines, and stay on top of current technologies.

Education: Bachelor of Science or higher in Computer Science or Software Engineering or equivalent

Experience: 1-3 years of software development experience with object-oriented programming
- Strong object oriented language skills with Java or C++ or C# required
- Strong skills in SQL and database concepts required
- Experience with Crystal Reports or other powerful reporting system
- Experience with Oracle a plus
- Excellent written and oral communication skills
- Highly motivated, fast learner who works well both independently and within a team
- Experience with Microsoft development tools and source control a plus
E-Voting: Invitation to High-Speed Fraud—Seminar Held at CCSU

The Departments of Computer Science & Philosophy, & The IEEE Computer Society Connecticut Section presented a seminar on Wednesday, December 6, 2006 regarding Electronic voting (E-voting). Dr. Stephen Unger, from Columbia University was the speaker at this event.

E-voting systems are rapidly being deployed in the U.S. A number of different types, produced by different companies, are available.

Many engineers have expressed concern about the extent to which E-voting systems are vulnerable to corruption. This issue is of fundamental importance, as a principal foundation of any democratic system is a precise and accurate means for determining the wishes of the voters.

The difficulties involved in detecting corrupting features of e-voting systems was discussed, and a case will be made for a much simpler voting methodology.

About the Speaker:
Stephen H. Unger is a Professor of Computer Science (and of Electrical Engineering) at Columbia University. He has published many papers on various aspects of computer science. His current research is in self-timed systems. Prior to coming to Columbia University, Dr. Unger was with the Bell Telephone Laboratories for about five years, doing research and then heading a group developing software tools for the first electronic telephone switching system. He has spent summers and sabbatical leaves at various companies, including Bell Labs, and IBM, and also done consulting work. Dr. Unger has published many papers and given many talks on technology policy issues, including engineering ethics, energy, government imposed secrecy, and the engineering employment crisis. He is the author a number of respected texts, including Asynchronous Sequential Switching Circuits, The Essence of Logic Circuits, and Controlling Technology: Ethics and the Responsible Engineer.

For Further Information, Contact the Department of Computer Science, or Brian O’Connell – oconnellb@ccsu.edu

In above photo: Professor Brian O’Connell with speaker Dr. Stephen Unger.

CCSU Computer Club

The CCSU Computer Club meets in the Computer Projects Laboratory in room 314 of the Maria Sanford Hall. The club hosts a variety of activities including the Wiki web server, a Linux gaming server, and free student web hosting. If you are interested in joining the Computer Club you can contact one of the following people for more information:

President: Andrew Sotzing
sotzinganj@ccsu.edu

Treasurer: Rahul Samanta
samantarah@ccsu.edu

Advisor: Brian O’Connell
oconnellb@ccsu.edu

NUClEuS

Game Development Group

It has been more than two decades since the Nintendo Entertainment system entered the living room, bringing back gaming from the brink of extinction and introducing a new era of interactive entertainment. This means for many students entering college, video games are not a recent innovation, or an intriguing phenomena—they are a given, a hobby that has existed as long as they have. It would then seem only natural that some students would grow very interested in these games, and take on the task of making games for a new generation. Many of the group members also have a higher goal in mind; allow for a major at CCSU that accepts games as art and as a worthy form of study, deemed “Ludology”.

“The NUClEuS is very important to me, and hopefully, will prove important to Central as well,” Alex Jarvis commented. The NUClEuS is underway with it’s first title, which will be for the XBOX 360, currently and tentatively titled “ChalkBoard Warrior”. They are always looking for new members, and the NUClEuS can be reached at the.nucleus.ccsu@gmail.com, or by visiting Alex’s Blog (where you can also keep up with the development of the game, along with a chance to appear in it!) at: ludologistjarvi.blogspot.com.
Scholarship Awarded to CS Faculty Member
Dr. Neli Zlatareva

Neli Zlatareva, Ph.D. at Central Connecticut State University (Computer Science Department), has been awarded a Fulbright Scholar grant to (lecture/do research) at CCSU, USA during the 2006-2007 academic year, according to the United States Department of State and the J. William Fulbright Foreign Scholarship Board.

Neli Zlatareva will lecture and do research on Knowledge Verification and Validation Problems in Merging Domain Ontologies at the University of Sofia, Bulgaria.

Dr. Zlatareva is one of approximately 800 U.S. faculty and professionals who will travel abroad through the Fulbright Scholar Program. Established in 1946 under legislation introduced by the late Senator J. William Albright of Arkansas, the Program’s purpose is to build mutual understanding between the people of the United States and the rest of the world.

The Fulbright Program, America’s flagship international educational exchange program, is sponsored by the United States Department of State, Bureau of Educational and Cultural Affairs. Since its inception, the Fulbright Program has exchanged approximately 273,500 people—102,900 Americans who have studied, taught or researched abroad and 170,600 students, scholars and teachers from other countries who have engaged in similar activities in the United States.

Recipients of Fulbright awards are selected on the basis of academic or professional achievement, as well as demonstrated leadership potential in their fields.

Fulbright recipients are among over 30,000 individuals participating in U.S. Department of State exchange programs each year. For more than forty years, the Bureau of Educational and Cultural Affairs has supported program that seek to promote mutual understanding and respect between the people of the United States and the people of their countries. The Fulbright Scholar Program is administered by the Council for International Exchange for Scholars.

For further information about the Fulbright Program or the U.S. Department of State’s Bureau of Educational and Cultural Affairs, please visit their website at http://exchanges.state.gov or contact Heidi Manley, Office of Academic Exchange Programs, telephone 202-453-8534 or e-mail academic@state.gov.

CS Faculty Member Introduces New Book
Zdravko Markov, Ph.D. recently introduced his new book, Data Mining the Web: Uncovering Patterns in Web Content, Structure, and Usage, which he co-authored Daniel T. Larose, PhD. Professor Markov is Associate Professor of Computer Science at Central Connecticut State University. The author of three textbooks, Dr. Markov teaches undergraduate and graduate courses in computer science and artificial intelligence. He is currently a Principal Investigator (PI) in a National Science Foundation–funded project designed to introduce machine learning to undergraduates. Daniel T. Larose, Ph.D, is Professor of Statistics in the Department of Mathematical Sciences at CCSU. He is the author of three data mining books and a forthcoming textbook in undergraduate statistics. He developed and directs CCSU’s DataMining@CCSU programs.
Faculty Professional Activities

Stan Kurkovsky
♦ Selected as a Featured Reviewer, ACM Computing Reviews, 2007. (Other)

Zdravko Markov
♦ Markov, M., Larose, D., Data Mining the Web

Brian M. O’Connell
♦ B. O’Connell (Ed.), with L. Bos, L. Roa, K. Yogesan, A. Marsh & B. Blobel, Medical and Care Compunetics 3, IOS Press, 2006.22 (Publication)
♦ B. O’Connell, Social Implications of ‘Robo-Ethics’, EURON Robotics Atelier, Genoa, Italy, February 27, 2006. (Presentation)

Neli Zlatareva
Using Safari E-books through the Burritt Library
Go on a Safari!

Safari is a product of O'Reilly publishing. Through this database you now have access to over a thousand electronic books on technical subjects ranging from programming to applications to computer science. In addition to O'Reilly there are also books from The Pearson Technology Group which includes the publishers Addison-Wesley, Financial Times Prentice Hall, Cisco Press, and Prentice Hall.

As you can probably tell these books are all IT related. We chose to do this for a number of reasons. First, IT books tend to become obsolete very quickly. Safari's books are always up to date. Secondly we want to pay attention to what you are reading. By looking at the books checked out we are better able to see trends and spot the needs of our users.

To access the Safari collection go to the library's home page at

http://library.ccsu.edu/

Click on “Database Finder” then choose “S” for Safari and click on the first link.
Using Safari E-books through the Burritt Library (continued)

This will take you straight into the Safari website.

Make sure you are logged in as Central Connecticut State University.

There you can search by title or category. Best of all, if you want to cut and paste that bit of code you’ve typed out three times and still can’t get right. For example from this page I copied the command for starting the Apache web server at the command line.
The Gamma Chapter of Upsilon Pi Epsilon

To be eligible to join UPE you must be a Computer Science Major and maintain a grade point average of 3.5 or greater. For more information about UPE contact Dr. Rathika Rajaravivarma at rajaravivarmar@ccsu.edu.

**Distinguished Honors in Computer Science**

Congratulations to all the Computer Science Majors who have maintained a grade point average of 3.5 and higher.

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<tr>
<th>CS Honors</th>
<th>CS Alternative</th>
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<tr>
<td>Tommy Carpenter</td>
<td>Renee Adie</td>
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<td>Anthony DeCusati</td>
<td>Justin Babey</td>
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<td>Justin Gatzen</td>
<td>James Gleckler</td>
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<td>Daniela Hristova</td>
<td>Lori Harris</td>
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<td>Joseph Sinkiewicz</td>
<td>Andre Holmes</td>
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<td>Jeffrey Sorbo</td>
<td>Brendan Kearney</td>
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<td>Andrew Sotzing</td>
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<td>Bryant Torres</td>
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**CIT Students with Computer Science Concentration**

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<tr>
<th>Amanda Abbey</th>
<th>Raul Filigrana</th>
<th>Sanket Kamat</th>
<th>Robert Norris</th>
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<td>Jonathan Beaulieu</td>
<td>Lynroy Grant</td>
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<td>Jaydip Bhalodi</td>
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<td>Mehnaz Khan</td>
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<td>Scott Dismard</td>
<td>John Kallipolites</td>
<td>David Noell</td>
<td>Ashley Stone</td>
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Dedicated to preparing students for successful computing careers.

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