Dear CSE Students:

Welcome to the first newsletter of the Spring 2016 semester.

**Message from the CS and CpE UG Advisor:** Welcome back to a new year and a new semester. We are compiling an FAQ to help you get quick and complete answers to common questions. See our new website: http://www.usf.edu/engineering/cse/. The FAQ is on the undergraduate page. Please let us know if you find errors or omissions in the website – it is still new and “under construction” in a few places.

**Message from the IT UG Advisor:** We are sorry to inform you that Dr. Bao passed away suddenly, he was an outstanding teacher and researcher and will be missed by all who admired and respected him as an individual, instructor and leader of our program. If you have not accepted and/or not seen an invitation for the IT Colloquium Session Tracker, make sure you contact me immediately so I can add you.

**Message from the Grad Program Assistant:** Welcome back graduates! Please contact me about all wait list questions and potential forms for graduation for those that are wishing to graduate this semester. For those that have signed up for Qualifiers, you will receive more information for the exam day soon. Those that are TA/RA’s Please see me for tuition waivers, if it is covered by your professor. Any other questions, please feel free to contact me. Have a great semester! Graduate Academic Program Specialist, Monique Mavour

Attached are announcements for the following (please note that this listing does *not* imply University or Department endorsement in any way):

- Microsoft Development Network Algorithms Challenge Event (free food)
- Summer Research Expeditions (SRE) for Undergraduates at John Hopkins
- Summer Security Bootcamp at Carnegie Mellon
- NCAR Summer Undergraduate Program for Engineering Research
- AccessComputing Research Experiences for Undergraduates
- 2016 State of Manufacturing Tour – Computing to Win
- Summer Instructor/Staff positions for STEM programs from ID Tech
- JP Morgan Code for Good Challenge event
- Brandeis University M.A. in Computational Linguistics
- Attention Self and World Seminar (Prof. Sanocki / Psychology; Mondays 2 - 4:30 PM, Spring 2016)

Regards,

Ken Christensen
Director of the Undergraduate Program (and Newsletter Editor)
Email: christen@csee.usf.edu

The archive of old newsletters can be found at http://www.usf.edu/engineering/cse/undergraduate/student-newsletter.aspx
Algorithms Challenge Event

- Come out to our very 1st event of the semester!
- Challenge yourself and your friends.
- Team up to 3 people max or Solo it out.

Everyone is invited, whether you are BEGINNER or EXPERIENCED, we encouraged you to come out and mingle while solving various algorithms.

*** FREE FOOD for Participants ***

Date: 01/21/2016   Time: 5:00PM   Location: ENB 313
Summer Research Expeditions (SRE) for Undergraduates
Department of Computer Science

- Machine Learning • Computational Biology
- Computational Healthcare • Algorithms for Big Data
- Natural Language Processing • Computer Vision and Robotics

- Dates: May 23-July 21, 2016
- Stipend and Housing are provided
- Local lab tours & Presentation Classes

APPLICATIONS DUE BY: February 15, 2016
To submit application visit: http://cs.jhu.edu/sre
Phone: (410) 516-6282 E-mail: jkastne2@jhu.edu

JOHNS HOPKINS
WHITING SCHOOL OF ENGINEERING

Ideate. Innovate. Inspire.
IT Lab: Summer Security Intensive (SSI) is a paid seven-week summer fellowship where participants:

- Study with the world’s leading security, analytics and policy researchers
- Take coursework in security analytics and policy

Whether you are interested in IT, data analytics, or cyber security, Carnegie Mellon University delivers an excellent summer experience.

Carnegie Mellon University’s H. John Heinz III College is home to the most well regarded master’s programs in IT Management and Information Security in the world. A unique aspect of our cyber security curriculum is that it is relevant for not only technologists but also for students from all backgrounds with a sincere interest in IT security and policy.

SSI provides an opportunity for participants to engage in this unique academic and experiential environment. Participants take classes and interact with some of the world’s foremost experts in information security.

CMU’s seven-week Security Boot Camp takes place at our Pittsburgh, PA campus from June 9 to July 30, 2016. Heinz College will provide a stipend and cover the costs of housing, meals, tuition, books, supplies, social functions, and travel expenses to and from Pittsburgh for SSI participants.

Successful Applicants will:
- be entering their senior year of college in Fall 2016
- be a U.S. citizen or Permanent Resident
- have a cumulative undergraduate GPA of 3.2 or higher
- have a sincere interest in cyber security and cyber policy
- complete the online application process by March 1, 2016

To learn more or to apply, please visit:  http://heinz.cmu.edu/itlab

SSI participants will take three specialized courses over the summer at CMU focusing on security policy and technology implementation as well as engage in an interactive colloquium addressing issues facing security professionals.

Students who complete SSI and are later admitted to a master’s program at Heinz College will be eligible to receive a scholarship of at least 50% of tuition.

Application Deadline: March 1, 2016 Contact: David Eber - debe@cmu.edu

As our world becomes increasingly digitized, the privacy, intellectual property, and fraud risks continue to grow. These cyber threats are highly relevant to all sectors of the economy, which is driving a major talent shortage for the information security industry.
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Application Deadline: March 1, 2016 Contact: David Eber - deber@cmu.edu
Summer Undergraduate Program for Engineering Research

The Earth Observing Laboratory (EOL) is committed to building a professional STEM workforce for future generations, and offers a unique experience with foundations in observational science and engineering to undergraduate students. EOL hires undergraduate engineering students who would like to gain skills and knowledge in the atmospheric sciences during the summer months for the Summer Undergraduate Program in Engineering Research (SUPER). SUPER interns work hand-in-hand with NCAR/EOL engineers and technicians on atmospheric observing systems and developments, including radar, lidar, and sounding systems and associated software developments. Interns may spend part of the summer participating in a field deployment, operating and supporting one or more EOL observing systems.
Gaining Practical Experience
While working at EOL, interns help develop new instrumentation and improve our existing suite of NSF/NCAR Lower Atmospheric Observing Facilities. Some internships offer the opportunity to gain practical field experience by operating and maintaining equipment during an NSF-funded research project. Interns are encouraged to develop their own engineering solutions as they work with and are mentored by professional, experienced engineers and technicians. During the internship, interns have access to a large number of resources such as sophisticated testing and calibration instruments, technical documentation, and state-of-the-art fabrication capabilities.

Who Should Apply?
EOL’s mission primarily requires electrical, mechanical, optical, and computer engineering skills but we encourage all engineering students to apply. Undergraduate students enrolled at accredited U.S. colleges and universities are eligible to apply for SUPER internships. However, note that some projects may require that the intern be (a) a U.S. citizen; (b) lawfully admitted for permanent residence in the United States; or (c) a protected individual as defined by 8 USC 1324b(a)(3).

EOL provides an hourly wage as well as travel support and housing while in Boulder and expenses in the field.

How Do I Apply?
SUPER is open to undergraduate engineering students enrolled in an accredited U.S. university or college. The application can be found through the UCAR Career Opportunities website: https://ucarcareers.silkroad.com/

I really enjoyed the actual writing of code and creating of applications that will really have scientific use. It’s a good feeling to have created something useful from your own efforts.

- Stephanie Fawaz, 2012

www.eol.ucar.edu/super
AccessComputing Research Experiences for Undergraduates

AccessComputing, a National Science Foundation funded project, aims to increase the participation of people with disabilities in computing careers. Once again, AccessComputing has funding for students with disabilities to participate in summer internships. Students participate in both research internships as well as non-research internships. As we all know, internship experience is important as students move on to the next steps of their careers.

Students with disabilities who are interested in summer internships are encouraged to fill out the form at: https://catalyst.uw.edu/webq/survey/blaser/283622 Through applying for an internship, students will have the opportunity become AccessComputing student team members. Student team members engage in online mentoring and are eligible to request funding for internships, travel to conferences, and tutoring.

Faculty who are interested in hosting an AccessComputing student with a disability as a research intern, are encouraged to complete the form at: https://catalyst.uw.edu/webq/survey/blaser/283619

Learn more about AccessComputing by checking out our latest Opportunities! newsletter that helps students with disabilities learn about careers in computing, locate resources, and learn about opportunities for students with disabilities.

For more information or help with the application, contact Brianna Blaser at blaser@uw.edu.

Best,

Brianna

Brianna Blaser, Ph.D.
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HEAR
National Association of Manufacturers (NAM) President and CEO Jay Timmons, who represents more than 14,000 manufacturing companies in the U.S.

JOIN
students, faculty, manufacturing executives, business and community leaders

LEARN
about the future of manufacturing in America

DISCOVER
new career opportunities

WIN
a Microsoft Surface 3, a product not only invented and designed by an NAM member but also powered by another, Intel.*

*Every registered student attending will be entered to win a Microsoft Surface 3.

2016 State of Manufacturing Tour
Thursday, January 28, 2016
6:30 PM to 8:00 PM
University of South Florida, Patel Center Auditorium, CGS 131
4202 East Fowler Avenue
Tampa, Florida 33620

Connect with Us!
#MFGisUS  #StateofMFG

www.nam.org
Summer Instructor/Staff for STEM programs

This summer, iD Tech will hire over 1,400 instructors and staff from across the world to show students, ages 6 to 18, firsthand how their interests in technology can turn into fun learning experiences. We have programs that emphasize tech education for girls, teens, tweens and younger children. We’re looking for energetic, tech-savvy, summer staff who understand the need for quality technology education for young students. So why not spend your summer instructing, mentoring, and building your resume in one of our amazing programs? You’ll make a positive impact on the lives of students this summer and potentially inspire them to aim for big ambitions. Our summer jobs are as fulfilling as they are fun! Staff members receive competitive compensation, room & board (overnight staff only), custom built apps supporting operations and curriculum, college internship credit (if applicable), guidance from our experienced team of managers, and more.

Take the first step to a great summer!

Learn more & Apply today

Katie Comerford  
Hiring Manager  
669.237.7573  
kcomerford@idtech.com
Code for Good Challenge

Application Deadline:
January 15, 2016

Event Dates:
Tampa, FL: Feb 5-6, 2016
Houston, TX: Feb 19-20, 2016

The URL for the application is case sensitive

jpmorganchase.com/techcareers

Build it.

Apply now for JPMorgan Chase’s Code for Good Challenge – our event created for college students who want to use their technology skills to do good for nonprofit organizations.

Join us for a 24 hour competition. Work alongside expert technologists from JPMorgan Chase. Think creatively. Solve real-world problems for nonprofits. We want you to come up with cutting-edge ideas that could make a difference to the people who need it most. Prizes will be awarded to winning teams – so get ready to code.

Plus, with JPMorgan Chase recruiters joining us for the session, it’s a chance to impress – and begin carving out a career for yourself.
Do you have a zeal for linguistic structure and a fascination with computer programming? Follow your passion into this burgeoning field, which is fueling the innovation in giants such as Apple, Amazon, and Google, and start-ups across the country and around the world.

The Brandeis M.A. Program in Computational Linguistics, offered by the Department of Computer Science, is an accessible, intensive two-year curriculum for students with a linguistics, language, computer science, mathematics, or science background—including students without prior study of computer science or linguistics.

- Extremely high placement rates in industry jobs or PhD programs—immediately after graduation and in ongoing, long-term CL employment
- Individualized curriculum plans
- Close teaching & mentoring relationships with faculty
- Guidance from the first semester toward a desired placement at graduation

Program Website: go.brandeis.edu/compling

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**CL Faculty**
- James Pustejovsky, Chair
- Nianwen Xue
- Lotus Goldberg, Advising
- Sophia Malamud
- Marie Meteer
- Ben Wellner
- Marc Verhagen

*Plus the faculty of the Brandeis Computer Science Department*

**At a Glance**
- Two-year program (if full-time; part-time enrollment also available)
- Rigorous yet accessible curriculum designed to supply the background and advanced skills needed for long-term careers in CL
- Standard scholarships of $20,000/year
- Teaching- & Research- Assistantships also available for qualified students
- FALL APPLICATION DEADLINE: February 15

**Brandeis University**
- A short car or train commute from Boston, Brandeis offers the strengths of a world-class research university with a collaborative, liberal arts atmosphere.
- Our location in the 'technology corridor' of the Cambridge and Boston area offers a wide range of job and internship opportunities.
- Prospective applicants are welcome to visit, meet faculty, sit in on classes, and speak with current students.

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**Two-Year M.A. Program**
- First year students take foundational CL and NLP courses, along with any needed background courses in computer science, linguistics, and mathematics.
- Second year coursework focuses on machine learning, information extraction, and advanced electives in CL and NLP applications—culminating in either an internship or master’s thesis.

**Regular Courses Include:**
- Programming for Linguistics
- Fundamentals of CL
- Statistical Approaches to Natural Language Processing
- Natural Language Annotation for Machine Learning
- Machine Translation
- Automated Speech Recognition
- Information Extraction
- Artificial Intelligence
- Computational Semantics
- Information Retrieval
- Intro to Big Data Analysis
Attention is an expansive field of inquiry that is central to the workings of mind and brain. Perhaps the best understood type of attention is selective attention, when the mind focusses on one stream of thought while excluding others. This seminar will begin with fundamental topics such as selective attention, awareness and pre-conscious processing, effects of self-relevance, and top-down influences. Then we will explore directions arising from participant's interests. One general theme will be the roles of attention and self in an increasingly complex world. Possible topics include:

Attention, Motivation, and Reward

Attention Set and Scene Perception

Attention and Self Concept

Mindfulness, Meditation, and Attention

Attentional and Creative Expression

Dr. Sanocki's seminars encourage broad thinking as well as research within individual directions. Participants will read a variety of literature, make presentations, research their interests, and write several shorter papers and one longer paper developing their interests together with some core seminar ideas.

Permission is required for most students. I am looking for motivated students who can made good contributions to the seminar. Interested students should e-mail with a statement of your interest and background. A good background may include good grades in undergraduate Psychology research courses, expertise in a related field (e.g., Computer Science, Education), or evidence of independent scholarly or creative activity.