Dear CSE Students:

Welcome to the first newsletter of the Spring 2020 semester.

**Message from the UG Advisor:** Happy 2020! The spring term started on Monday, January 13th. The add-drop period closes on Friday, January 17th. Please finalize any adjustments to your schedule by that date. You will not be able to register in OASIS after that Friday. Remember that the first-day attendance policy requires you to be present for the first meeting of your in-person classes. For online courses, pay attention to instructor announcements in Canvas and the course syllabus for details about any requirements due during the first week. Walk-in Advising is available as scheduled. See the CSE website for details. Please note that we will not be available for walk-in advising on the afternoons of January 9th and 10th due to orientation activities. Scheduled appointments are available through Archivum in MyUSF.

**Message from the Grad Program Assistant:** Welcome back and welcome to USF to all new students!
- Please make sure that your schedules are finalized by the end of drop/add week (January 17 at 5pm). If you are not an RA/TA, your tuition fees must also be paid by January 17.
- If you have been appointed as an RA/TA, do not forget to submit your Tuition Waiver form as soon as possible. Your tuition fees will be due February 28 by 5pm (if you are on GEMS by January 17 by 5pm)
- TA Orientation will be January 8 at 3:00pm in ENB 313.
See me in ENB 342E if you have any questions.

Attached are announcements for the following (please note that this listing does not imply University or Department endorsement):
- Brain-Computer Interface Club Flyer
- Rutgers HackHERS Hackathon
- Department of Defense Cybersecurity Scholarship Program
- Johns Hopkins Research Experience for Undergraduates in Computational Sensing and Medical Robotics
- Undergraduate Research in Educational Data Mining
- The Institute for Broadening Participation Paid Summer Research Programs
- USF Eye Institute Part-Time Research Assistant Job Opportunity
- Brandeis University MS Program in Computational Linguistics
- Resilience, Inc. Volunteer/Internship Opportunity
- Systems Security Engineer Internship Opportunity
- New Grad Computer Science/ Information Technology Job Opportunity
- Collabera Project Data Analyst Job Opportunity
- Senior Expert in AI Job Opportunity
- Modelithics Software Developer/IT Support Job Opportunity
- Animation for Students with Disabilities Job Opportunity

Regards,

Ken Christensen
Professor and Associate Chair of UG Affairs
BRAIN-COMPUTER INTERFACE CLUB

Brain Computer Interfaces allow users to manipulate computers and machinery with their thoughts.

Brain Drone Racing is a universal sport that allows people to compete in a drone race by controlling drones with their brain.

Join us on BullSync to learn more!

Neuro-Machine Interaction Lab

neurosymbiosis.com

NMIL_USF

neuro.machine
interaction
RUTGERS WOMEN IN COMPUTER SCIENCE PRESENTS:

**HackHERS**

FEBRUARY 22-23, 2020
COOK STUDENT CENTER || RUTGERS UNIVERSITY-NB

REGISTER NOW @ RUHACKHERS.ORG
Department of Defense
Cybersecurity Scholarship Program (CySP)

The DoD is seeking rising junior and senior (third and fourth year) undergraduate and graduate/doctoral students who are interested in full-ride scholarships for concentrated studies in cybersecurity and other cyber-related disciplines. This requires the student to agree to serve one year of **civilian** service to the DoD, upon graduation, for each year or partial year of scholarship received, in addition to an internship. Active and Reserve military are also eligible, but have different service payback requirements.

Students selected as CyberScholars will receive the full cost of tuition, required books (not optional ones), required fees (including health care), and a stipend to cover room and board. The stipend levels are $25,000 for undergraduate students and $30,000 for graduate (Master’s/PhD) students.

To be eligible for the CySP opportunity described in this announcement, you must meet all of the following minimum requirements:

- At least 18 yo
- U.S. Citizen
- Able to obtain a security clearance
- Completed at least the first two years of an undergrad degree program
- Pursuing a degree in one of the scientific, technical, or managerial disciplines related to cyber or with a concentration in cybersecurity
- Have at least a 3.2 GPA (for undergrads) or 3.5 GPA (for graduate students)

For more detailed information on the application requirements, visit:

https://tinyurl.com/vh37sam

For questions, please email Dr. Randy Borum (borum@usf.edu) with “DoD CySP Query” in the subject line.

The deadline to submit a completed application packet is **Noon on February 1, 2020.**
RESEARCH EXPERIENCE FOR UNDERGRADUATES IN
COMPUTATIONAL SENSING &
MEDICAL ROBOTICS
(CSMR REU AT JOHN HOPKINS UNIVERSITY)
LABORATORY FOR COMPUTATIONAL SENSING AND ROBOTICS,
COMPUTER INTEGRATED SURGICAL SYSTEMS & TECHNOLOGY
ENGINEERING RESEARCH CENTER
Baltimore, Maryland

Program Dates:
May 26, 2020 - August 1, 2020
Stipend & housing provided!

Application due date:
February 16, 2020
Direct questions to
Dana Walter-Shock
dwalte10@jhu.edu

SUMMER PROJECTS
- Medical Robotics
- Brain Imaging
- Computer Vision
- Software development
- Multisensory Control in Locomotion
- Ultrasound & Photoacoustic Imaging
- Machine Learning & more!

Go to http://lcsr.jhu.edu/reu for more information.
Undergraduate Research in Educational Data Mining

The primary goal of this interdisciplinary REU Site program is to expose ten high quality undergraduate students to advanced topics in analytics, data mining, and visualization techniques as applied to data from the education domain. Students will participate in projects with the central theme of improving instructional technology design, enhancing academic curricula and modeling learning experiences. From an analytical methodology standpoint, projects will investigate approaches to model the dynamic knowledge state of a student/learner in different settings.

Apply for 2020!
Deadline: February 15th, 2020

All materials (see below) must be received by end of day on Saturday, February 15th, 2020. There are two documents the student prepares and submits, as well as a questionnaire to complete; there are also two recommendations for separate recommenders to submit.
We will likely start contacting selected applicants on a rolling basis on or around March 16th; please be patient! ;)

Eligibility

Students must be a U.S. citizen or Permanent Resident, and must be currently enrolled in an accredited undergraduate program.

Instructions

In order to apply, you will need to gather or complete the following:

1. Complete this 2020 Questionnaire (Google form).
2. By February 15th, 2020 (end of day), applicants and recommenders should all submit materials to this link: 2020 REU@GMU Applications [See the requirements below]
   ▪ Statement of Purpose document as a pdf (essay that introduces yourself, explains how the experience would benefit your education, etc.). Roughly a page to 1.5 pages estimated maximum.
     ▪ name it LastName_FirstName_SOP.pdf, e.g. Hopper_Grace_SOP.pdf
   ▪ Resume as a pdf (listing your experiences and current skillset).
     ▪ name it LastName_FirstName_Resume.pdf, e.g. Lovelace_Ada_Resume.pdf
   ▪ Two References from two recommenders (ask them first!), who are willing to write a recommendation letter on your behalf. These should be people who mentored or taught you in an academic setting, preferably related to computing.
     ▪ recommendations should be named after the student applying. The pattern should be LastName_FirstName_Recommendation_recommender.pdf, e.g. Hopper_Grace_Recommendation_MrsCobol.pdf, and uploaded at the link by the referee at 2020 REU@GMU Applications
Paid Summer Research Programs
The Institute for Broadening Participation (IBP)

Most programs offer both a stipend and housing and travel support. Programs range across all STEM disciplines and all areas of the country!

- 570+ programs for undergraduates
- 60+ programs for graduate students
- Use our advanced search page to filter programs by multiple criteria
- Contact us with your level of study and disciplinary interests for help finding a program: ldetrick@ibparticipation.org

The mission of the Institute for Broadening Participation is to increase diversity in the Science, Technology, Engineering and Mathematics (STEM) workforce. We design and implement strategies to increase access to STEM education, funding, and careers, with special emphasis on reaching and supporting individuals from underserved communities and underrepresented groups, including underrepresented minorities, women, persons with disabilities, first generation college students, and students from underserved communities. The Institute for Broadening Participation is a 501(c)(3) organization, tax ID #20-1891162. Your contribution is tax-deductible to the extent allowed by law.
USF Eye Institute
Open Position: Part Time Research Assistant

• Opening available for part-time undergraduate research assistant in the USF Department of Ophthalmology

• Position would involve code development on several clinical projects.

• Paid position with the opportunity for authorship if publications result.

• Minimum Qualifications: Comfortable with at least one of C#/C++/Python as well as git

• Preferred: Unity, Android Game Development, Machine Learning Experience. Interest in medicine or ophthalmology a plus.

• Contact: pbrunetti@usf.edu include CV and brief statement of interest.
Do you have a fascination with linguistic structure and computer programming? Build a strong foundation in computational linguistics and natural language processing and acquire the advanced skills and techniques needed for long-term success in a field that is fueling innovation in large companies like Apple, Amazon, Microsoft, and Google, as well as small and medium-sized companies, start-ups, and research institutes across the country and around the world.

The Brandeis MS Program in Computational Linguistics, offered by the Department of Computer Science, is an accessible, intensive two-year curriculum for students with a linguistics, computer science, mathematics, language, 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

Two-Year MS 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 an internship, Master’s thesis, or capstone project.

Regular Courses Include:
- Intro to NLP with Python
- Fundamentals of CL
- Natural Language Annotation for Machine Learning
- Statistical Approaches to Natural Language Processing
- Automated Speech Recognition
- Information Extraction
- Artificial Intelligence
- Computational Semantics
- Information Retrieval
- Multiple courses on Big Data Analysis

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

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 supplies the background and advanced skills needed for long-term careers in CL
- Generous scholarships available
- Teaching- & Research- Assistantships also available for qualified students
- FALL APPLICATION DEADLINE: January 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.
Volunteer/Intern for Resilience, Inc.

Resilience, Inc. is a non-profit organization that focuses on developing a no-cost Social Emotional Learning (SEL) curriculum and offering it to schools with students in grades K-12 across the country.

Internships Available:  
- Earn Real Work Experience  
- Learn How Companies Operate  
- Boost Your Resume  
- Help a Great Cause  
- Obtain Class Credit

Seeking the Following Majors:  
- Psychology & Health  
- Education & Communications  
- Computer Science & Engineering  
- Finance & Business Management  
- All Majors Welcome to Apply

We are dedicated to addressing mass shootings, suicide, depression, declining test scores, low student engagement, and a slew of other social issues by offering Social Emotional Learning tools to enable K-12 schools to teach emotional intelligence, self-control, relationship management, goal setting, effective decision making, and tools for acquiring and maintaining inspiration, hope and overall wellbeing.

Contact Information:  
lhuynh@mylearningtools.org

For more information, visit www.mylearningtools.org
Systems Security Engineer Intern

Clearwater, FL, United States  |  HRD74029

Are you ready to help us make the future?

Join the System Security Engineering Group within the Defense and Space Electronics organization. You will work with a team of engineers to analyze various electronics packages and reduce potential exploitation risks. Your duties may include analysis of existing and new products, test or qualification. Your tasks will include critical thinking, analysis, security support, documentation, and recommendation of solutions to customers. You will be part of a team of engineers driving technical solutions that meet key program milestones and cost objectives.

Technical Problem Solving
Hardware Build and Test Execution
Technical Documentation
Project Schedule, Budget and Milestone development and management

YOU MUST HAVE

Currently pursuing a Bachelor’s degree in Electrical Engineering, Cyber Engineering or Computer Engineering
Must graduate after December 2020
Must continue enrollment in degree program upon completion of the internship
Must be a US Citizen due to contractual requirements

WE VALUE

Individuals who are self-motivated and able to work with little supervision, who consistently take the initiative to get things done
Experience in system security engineering including knowledge of NIST 800 standards, cryptographic techniques, and engineering design
Ability to create specific action plans, prioritize time and resources effectively
Able to convey technical ideas and concepts through team discussions, presentations, and in writing
Able to work with cross-functional teams to meet expectations of internal and external customers
Conveys information with clarity and directness, ensuring the message is understood across diverse, global teams
Consistently makes timely decisions even in the face of complexity, balancing systematic analysis with decisiveness
Masters degree in Cyber Security Engineering, Electrical Engineering, and/or Computer Engineering is highly valued

Additional Information

Honeywell is an equal opportunity employer. Qualified applicants will be considered without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality, sex, religion, or veteran status.

For more information on applicable equal employment regulations, refer to the EEO is the Law poster.

Please refer to the EEO is the Law Supplement Poster & the Pay Transparency Policy.

For more information on how we process your information in the job application process, please refer to Recruitment Privacy Notice.

If a disability prevents you from applying for a job through our website, request assistance here. No other requests will be acknowledged.
New Grad CS/IT Job

Position Details:
Industry: Financial
Job title: Analyst
Location: St. Petersburg, FL
Duration: 12+ Months (High Possibilities of Extension)

Day to Day: This candidate will be working closely with the IT Conversions team. They will be shadowing and supporting any de-conversion needs. They will be working on any project de-conversions/conversions that the client is supporting in their new acquisition project. This candidate must be willing to come out to this team with an open-mind, high energy, and ready to learn.

Must Have:
- MS Project Experience working through the entire Project Life Cycle
- Experience working on project de-conversions/conversions

Plus:
- High energy candidates that are quick and eager to learn

If interested, please reply back with your updated resume in Word / PDF format at your earliest convenience. As a reply to this email, you confirm that you have read and understood the Job Description properly and you believe that you will be a good fit for this role.

Name: Dhaval Panchamiya Email: Dhaval.panchamiya@collabera.com
Number: (973) 804-4245
Collabera

NOW HIRING

A Fast-growing company Financial Services is looking for the best candidates in the market

Project Data Analyst - I / Project Analyst - I

GENERAL REQUIREMENTS

Day to Day:
This candidate will be working closely with the IT Conversions team. They will be shadowing and supporting any de-conversion needs. They will be working on any project de-conversions/conversions that the client is supporting in their new acquisition project. This candidate must be willing to come out to this team with an open mind, high energy, and ready to learn. Heavy Data (analysis) related work included.

Must Have:
• MS Project
• Experience working through the entire Project Life Cycle
• Experience working on project de-conversions/conversions

Plus:
• High energy candidates that are quick and eager to learn

You can send your CV or Resume to:
Dhaval.panchamiya@collabera.com

973-804-4245
We are recruiting an expert on AI

Date: 17th December 2019

We seek a creative and dedicated AI expert to join our international team working at the intersection of communication technology and national security.

Main Duties:

The Senior Expert (SE) follows the development of AI and is able to advise and educate the personnel of the COE on developments in the field. The successful candidate will have expertise in the ways that new developments in AI create or enhance social, political and security vulnerabilities.

The SE will contribute to developing tools designed to detect and expose messaging created or disseminated using AI systems. The candidate will conduct research experiments to test what is and is not possible in this area. They must have strong experience using a variety of data mining/analysis methods and in using or creating algorithms.

The SE will communicate findings in an accessible format through research publications and presentations aimed at audiences including military officers, academics, and government decision makers.

The SE works closely with the Principal Scientist and the Software Engineer of the Technical and Scientific Development Branch.

Post context

The NATO StratCom COE, based in Riga, Latvia, contributes to improved strategic communications capabilities within the Alliance and Allied nations. Strategic communication is an integral part of the efforts to achieve the Alliance’s political and military objectives, thus it is increasingly important that the Alliance communicates in an appropriate, timely, accurate and responsive manner on its evolving roles, objectives and missions.

The Centre’s mission is to provide tangible contributions to the strategic communications capabilities of NATO, NATO allies and NATO partners. Our strength is built by multinational and cross-sector participants from the civilian and military, private and academic sectors and usage of modern technologies, virtual tools for analyses, research and decision making.

NATO StratCom COE consists of a diverse group of international experts with military, government and academic backgrounds - trainers, educators, analysts and researchers.

The Senior Expert on AI will be based in the Technical and Scientific Development Branch. The Branch's major functions is to develop audience characterization tools, conduct social-media analyses, process data flows, develop external communication tools, and to establish and maintain networks and links amongst subject-matter experts.

General duties of Senior Experts at the COE:

1. Plans and conducts training and education assignments and projects.
2. Manages and plans project timelines and budgets.
3. Provides expertise on government-wide Strategic Communications capability building and implementation of StratCom approach in resilience building.
4. Provides expertise on Strategic Communications policy development at NATO.
5. Provides expertise on StratCom-related academic research and policy developments in other International Organizations (e.g. EU, UN).
6. Supports the delivery of Centre’s courses and seminars.

Essential Qualifications

1. Strong background in programming, data science, machine learning, or related area.
2. Excellent presentation skills.
3. Experience in working in multinational environment.
4. Advanced English language proficiency (Work in the organization is conducted primarily in English).

Desirable Qualifications

1. Experience in conducting research projects at an international level.
2. Fluency in several computer languages.
3. Comfortable working with databases.
4. Demonstrated understanding of ethical and social implications of AI.
5. Project management skills.
6. In-depth knowledge of NATO.
7. Master’s degree in computer science or related discipline.

Salary level: 3000 - 4600 EUR GROSS.

Appointment will be subject to receipt of a security clearance provided by the national Authorities of the selected candidate.

Candidates are kindly requested to email a CV and motivation letter to jobs2020 [at] stratcomcoe [dot] org. The motivation letter should outline why the candidate is a good fit, their vision for the post, and include a freeform discussion on security challenged posed by developments in AI. Candidates are requested to send their applications by latest 16 January 2020, 23h59 CEST.
Job Title: Software Developer/IT Support

Description: Modelithics, Inc. is looking for a strong programming background with the ability to efficiently multi-task in an ever-changing environment. Primary duties are to assist in the development of our flag ship library product of electronic component software models for use in multiple computer aided engineering (CAE) simulation products using SOP’s (standard operating procedures) as well as independent judgment, after suitable training on each task. Duties may include model development, interfacing with each of the supported simulators, packaging, building installers, testing, and documentation. Additional tasks may include: developing applications to improve the efficiency of our daily operations; support and improve existing products; adding additional features; develop an interface to additional simulators; update and maintain the database driven website; troubleshoot Windows operating systems; license the products; and customer support. The programmer may also be asked to assist with automation of lab and engineering tasks and processes. Experience with LabVIEW, Matlab and Python software will be a plus related to this need. **Note: U.S. Citizenship or permanent residency is a requirement for this position.**

Required Experience/Skills:
- C/C++, CSS3, HTML5, SQL, ASP.NET, JavaScript or jQuery
- Microsoft Office
- Strong documentation abilities

Optional (Helpful) Experience:
- Python, LabVIEW, VM Ware
- Database driven Web Design with ASP.NET, SEO
- Website form development
- Firewalls, Windows Servers
- Flexera or Reprise Software licensing
- Linux RedHat or CentOS, Visual Studio
- Understanding of basic electronics

Location: Tampa, Florida

Email your Word or PDF resume and salary requirements to careers@modelithics.com. More information about careers at Modelithics can be found at: [http://www.modelithics.com/careers.asp](http://www.modelithics.com/careers.asp)
Interested in the Animation and Gaming industry? This program is designed for the student who has participated in Animation Gets Real summer camp at USF or an equivalent beginning animation program and is ready for the next step toward developing marketable employment skills. Students will be taught the various pathways they might take to meet their career goals while exploring the writing, storyboarding, modeling and audio/sound in the animation and gaming industries.

Prerequisites:
- Should be comfortable with Toon Boom Harmony and ready to discover Maya software
- Should be able to work independently and non-disruptively
- Should understand collaboration and be amicable to team projects.
- All applicants must submit a project representing skill level for review.

For more information and to register: wfinklea@usf.edu 813-974-0715 https://arts4allflorida.org/Community%20Art%20CLasses.html

Doug Sutherland has been teaching 3D Graphics and Animation for over two decades after receiving an MFA from Florida State University in 1979. Following graduation Doug moved to California and taught at California State Northridge, Ventura College and other schools throughout the state. He oversaw a grant in Animation and Gaming administered by Ventura College’s Multimedia Program which afforded him the opportunity to train extensively with Alias Wavefront’s education and training program on Maya 3D software. In 2003 Mr. Sutherland joined the Art Department faculty at the University of Tampa where he taught 3D Animation and related courses for 15 years. Currently he is working with 3D graphics and 3D printing to produce images and sculptural works for gallery exhibitions.