Dear CSE Students:

Welcome to the fourth newsletter of the Fall 2018 semester.

Message from the UG Advisor: IMPORTANT: For students planning to graduate in spring or summer 2018, the deadline to submit a graduation checklist is Friday, October 26th. You can find details about applying to graduate and many other details on the CSE website. [https://www.usf.edu/engineering/cse/undergraduate/graduation.aspx](https://www.usf.edu/engineering/cse/undergraduate/graduation.aspx) October 27th is the last day to withdraw with no refund and no academic penalty. Remember, withdrawing from a course is considered an attempt and may contribute to your excess hours count. Upper-level students may withdraw from up to two courses unless petitioning to withdraw from more due to exceptional circumstances. This is something you should discuss with an advisor. Registration for spring will begin at the end of October. Avoid the rush at the end of the month by scheduling advising now while our calendars are relatively open. Planning now will help you avoid waiting in line once registration starts. Registration times will be posted sometime in October. Remember to check your time and register as soon as you can. Don’t wait for fall grades to register for spring courses!!

Message from the Grad Program Assistant: Students graduating this semester, please make sure that you have applied for graduation via OASIS and that you have submitted your graduation checklist to me. If you were admitted on or after Fall 2017, in mind that you must pass the Comprehensive exam in order to graduate (non-thesis students only). Registration for the Spring semester will open October 29. Be aware of your registration time ticket! If you were admitted provisionally pending final transcripts, make sure the Office of Admissions has received your official transcripts.

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

- Office Hours for the CSE Programming Resource Center (PRC)
- Advancing Machine and Human Reasoning (AMHR) lab looking for Undergraduate Researchers
- Affective Computing Searching for 2 to 3 Undergraduate Assistants
- Brain-Drone Racing at USF
- Virtual Brain-Controlled Drone (E-Sport)
- NeuroSnap: Facial Filters with Brain Waves
- Harvet CROO Robotics (HCR) – Vision System Intern
- Career Services to CSE Students: Resumes, Interviews, and ePortfolios
- USF World Part Time Junior Developer Opportunity
- Promote NCWIT Collegiate Award Deadline October 15, 2018
- Amazon SUMMER Challenge: AR, VR & Immersive Apps Deadline January 8, 2019
- NASA Florida Space Grant Consortium
- ColDesi R&D Open Position in Largo, FL
- CAE Software Engineering Co-op Student in Tampa, FL
- Axiros Part Time Paid Work Project in Tampa, FL
- Secure Funding Strategies Website Manager Position in Wesley Chapel, FL
- Get Fast-Track for 2019 Jobs and Internships with IBM Through Uncubed
- WebstaurantStore Entry Level Software Engineers Open Positions
- Maantic Inc. Entry Level Robotic Automation Consultant

Regards,

Ken Christensen
Professor and Associate Chair of UG Affairs
The CSE Programming Resource Center (PRC) is the cubicle in the northwest corner of ENB 214 (C4 Lab). Teaching Assistants (TAs) from Programming Concepts (COP 2510), Program Design (COP 3514), Object Oriented Design (COP 3331), Data Structures (COP 4530), IT Programming Fundamentals, and IT Object Oriented Design staff the center to provide programming assistance to all CSE students in all Departmental courses. Note that the TA for your course is always your best resource, but all TAs will work hard to help you.

### Mondays
- **Efe Seyitoglu** <efe3@mail.usf.edu> for COP 2510: 11am – 12:30pm
- **Denis Laesker** <dlaesker@mail.usf.edu> for COP 3514: 11am – 12pm
- **Prakruthi Shivram** <prakruthis@mail.usf.edu> for IT COP 2513: 12:30pm – 3:00pm
- **John Rippetoe** <rippetoej@mail.usf.edu> for COP 4530: 2:00pm – 3:30pm
- **Raul Estrada Ballesteros** <raulestradab@mail.usf.edu> for IT COP 2512: 1pm – 3pm
- **Md Sirajus Salekin** <salekin@mail.usf.edu> for COP 2510: 3:30pm – 5:00pm

### Tuesdays
- **Joshua Imarhiagbe** <jimarhiagbe@mail.usf.edu> for COP 3331: T 12:30pm – 1:30pm
- **David Ehrenhaft** <dehrenhaft@mail.usf.edu> for IT COP 2513: T 12:30pm – 3:00pm
- **Maithili Mishra** <maithilim@mail.usf.edu> for COP 2510: T 2:30pm – 3:30pm

### Wednesdays
- **Padmavathi Siddi** <siddip@mail.usf.edu> for IT COP 2512: W 9am – 11am
- **Chengcheng Mou** <chengcheng@mail.usf.edu> for COP 4530: W 1pm – 3pm
- **Trisha Mukhopadhyay** <mukhopadhyay@mail.usf.edu> for COP 3331: W 2pm – 3pm
- **Jinghan Meng** <imeng@mail.usf.edu> for COP 3514: 2pm – 5pm
- **Garfield Huang** <yongqiang@mail.usf.edu> for IT COP 2513: W 4pm – 6pm

### Thursdays
- **Raul Estrada Ballesteros** <raulestradab@mail.usf.edu> for IT COP 2512: 9am – 11am
- **Kin Ng Lugo** <kinwaing@mail.usf.edu> for COP 2510: 1pm – 2pm
- **Anis Elebiary** <anis@mail.usf.edu> for IT COP 2513: 4pm – 6pm
- **Tracy Miller** <tamiller1@mail.usf.edu> for COP 3514: 5pm – 6pm

### Fridays
- **Sk Rahatul Jannat** <jannat@mail.usf.edu> for COP 3514: 2pm – 5pm
- **Krishna Patel** <krishna4@mail.usf.edu> for IT COP 2512: F 3:30pm – 5:30pm
Dr. Licato's Advancing Machine and Human Reasoning (AMHR) lab has an opening for undergraduate researchers in computer science or engineering.

This is a **paid** position, which involves developing a GUI for an automated reasoning system. Some experience in Java, Python, and NodeJS is preferred.

To apply, send your résumé or CV to Dr. Licato **as soon as possible** at licato@usf.edu.

The **Advancing Machine and Human Reasoning Lab** (AMHR, pronounced "ah-moor"), led by **Professor John Licato** in USF's **Department of Computer Science and Engineering**, is a cross-disciplinary lab dedicated to answering the following guiding research questions:

- How can artificial intelligence make people better reasoners?
- How can we create better artificially intelligent reasoners?
- How can we advance our knowledge of logic and other cognitive-level reasoning processes in order to produce better conclusions, justifications, and arguments?

We're devoted to not only creating smarter AI, but ensuring that these advances help improve, rather than replace, human reasoners. Think of what word processing software did for humanity: it has spell-checking, it takes care of document formatting, and allows people to focus more on the creative production of high-quality, professional documents. In other words, the *combination* of people and word processing software together does better than either one can do alone. We believe that one day, we can do this with logical reasoning.

To learn more about AMHR, click here: [https://sites.google.com/view/amhr](https://sites.google.com/view/amhr)
Affective Computing Searching for 2 to 3 Undergraduate Assistants

Dr. Shaun Canavan is looking for 2-3 undergraduates that are interested in joining his lab to assist PhD students. The Affective Computing lab, which is a part of the Computer Vision and Pattern Recognition lab, is looking for undergraduate assistants to join us.

Responsibilities will be to assist PhD students with research including, but not limited to, manual data separation, writing and debugging python code, and data collection. All class rankings will be considered; no preference will be given to any ranking. At the discretion of lab supervisor, Dr. Shaun Canavan, position may involve more self-directed research projects where the student will no longer be assisting PhD students, but conducting their own independent research, if the student wants to pursue this option.

There are currently multiple positions available. Applications will be accepted until all positions are filled. DO NOT email the lab supervisor or any members of the lab about these positions. ALL applications will be handled through the Google form that is linked below. If you have questions, you can input them at the bottom of this form. Dr. Shaun Canavan will contact you if necessary. Applicants under consideration will be contacted for further discussion.

Click on the link below to apply:
https://docs.google.com/forms/d/e/1FAIpQLSduZp7Mt1b4Tb16KsnoED9gNoda0vO_irWL4Iz7z0hebcyk-g/viewform?usp=sf_link
Brain-Drone Racing is a universal sport that allows people with disabilities (people in a wheelchair, upper or lower limb differences, etc.) to compete in the same race with someone who is considered healthy because the brain is only needed. Also, this sport integrates virtual reality, drones, and neuro technologies.

The next race event at University of South Florida will be hosted on February 9th, 2019. Check our social media for further updates.
A virtual drone in a simulation that can be controlled using brain-computer interface (BCI) devices. Users are capable of flying the virtual drone using their imaginary movement.

To control the simulated drone, the person needs to imagine a movement. Imagining a movement generates the same electrical signals as physically acting. BCI devices are used to capture such signals and send to the simulated drone for control. During training the user is asked to imagine a specific movement that will be associated with a drone command, later he will be able to control the drone by re-imagining that same movement.
Synopsis

NeuroSnap allows users to express their affective state through facial filters. It is the brain version of Snapchat. It measures electroencephalographic (EEG) signals from the user’s scalp. It decodes the EEG waves using proprietary algorithms from Emotiv and displays a particular filter representing the affective state based on the EEG waves: alpha (relaxed) and beta (alerted or focused). The user can see the filters on the computer once the camera has detected the user’s face using real-time facial detection.
Harvest CROO Robotics (HCR) – Vision System Intern

Vision System Intern – Computer Software / Image Processing / Vision Systems

Job Title: Vision System Intern

Harvest CROO is searching for an intern to assist in the design of a multispectral imaging system for a large, mobile, agricultural harvesting system. This opportunity is located in Tampa, FL.

JOB ROLE WILL BE TO:

The Vision System Intern will be responsible for creating software to assist in the evaluation and refinement of complex image recognition software. Additional responsibilities for the Vision System Intern may include the following:

Responsibilities
- Design software tools to evaluate performance of multispectral processing algorithms to identify, sort, and grade produce for an autonomous, robotic harvester.
- Evaluate algorithms on real-time processing hardware
- Test and assemble vision system optical and sensor components
- Assist in preparation of vision system hardware and software documentation

Required Skills
- Ability to code in a higher-level programming language such as C/C++, Python, or Java.
- Ability to use scientific analysis and prototyping environments such as SciPy/NumPy, R, or MATLAB
- Ability to work in a team environment
- Good communication skills, both written and verbal.

Preferred Skills
- Working knowledge of: image processing, image analysis, and/or computer vision
- Ability to code and debug GPU accelerated processing
- Ability to code and debug low-level device drivers

Education and Experience
- Pursuing an undergraduate degree in Engineering or Computer Science
- Good understanding of a higher-level programming language such as C/C++, Python, or Java.
- Significant experience with one or more scientific analysis and prototyping environments such as SciPy/NumPy, R, or MATLAB.

Contact: Dr. Moreno (in EE) at wmoreno@usf.edu
Career Services to CSE Students: Resumes, Interviews, and ePortfolios

As part of the continuing effort to provide quality career-related software to students at the University of South Florida, Career Services is moving away from the OptimalResume system in favor of other tools and services that are more easily accessible, provide better feedback to our students, and allow for continued access after graduation.

**Access to OptimalResume will end on July 24, 2018.** Students should take this opportunity to remove any documents that may be stored on OptimalResume’s website. We will be reaching out to all students by email to let them know about this deadline to remove documents. OptimalResume provided several different services for students such as resume creation and storage, and interview preparation. We have seen the number of new student accounts and existing account logins decrease dramatically over the years leading us to the decision to discontinue paying for this service.

Below, we’ve created a list of tools that are free for students.

**RESUME**

We recommend that students use resources available on our website to help them create their resumes from scratch, and then use the Handshake system to store their resumes. Handshake is the online career management tool and preferred job and internship platform at the University of South Florida. Students can upload their resume to their profile, use it to build their profile information, and make it visible to recruiting employers. All students have a Handshake account already created for them, which they can access through the MyUSF system. Students log on to MyUSF, hover over the My Resources tab, and click the “Find A Job (Handshake)” link. If they have any issues accessing their account, they can contact our office for assistance.

**INTERVIEW**

We recommend using Big Interview, a tool that helps students refine their interviewing skills with an interactive tool that dives into general, behavioral, and technical questions from over 140 industries. Students can record, play back, and re-record their responses to questions to see how they improve with time and they get access to an expert who can coach them through their responses.

**ePORTFOLIO**

There are a variety of ePortfolio tools that are available at no cost to students. If you are considering the use of an ePortfolio, please contact our office for assistance in selecting the best tool for your learning objectives.

We hope that you can make use of some of the tools that we have mentioned above for your students, and we welcome any feedback that you might have. **If you have any questions, comments, or suggestions, please contact Jean Keelan, Director of Career Planning.**

Career Services  
University of South Florida  
(813) 974-2171  
CareerServices@usf.edu
Junior Developer Opportunity

- Are you a fast learner who likes to solve problems and work on full stack development?
- Do you have strong javascript, html, and css knowledge?
- Do you have experience working with riotjs and firebase hosting?

USF World is looking for a junior developer to help improve the USF Global Discovery Hub! If you are interested, please apply online at the USF Careers website, Job ID 17856. The hourly salary is $15.50 up to twenty hours per week. Work flexible hours; work remotely; have regular mentoring and weekly team meetings.

***Qualified applicants will be asked to demonstrate their skills by creating a unique, real time, riotjs firebase application that reflects their creativity and ability to problem-solve.***

Questions may be directed to kcaruson@usf.edu or lkhthomas@usf.edu

Check out the USF Global Discovery Hub at www.usf.edu/gdh
Promote NCWIT Collegiate Award

Deadline October 15, 2018

Just a quick reminder that NCWIT is offering the Promote NCWIT Collegiate Award to ALL undergraduate and graduate women students majoring or minoring in computing-related fields are eligible to apply, and applications for 2019 are open until October 15, 2018. Recipients receive up to $10,000 in cash, a trip to the NCWIT Summit and other great prizes!

To apply, click here: https://college.aspirations.org/promoteaward
Amazon Sumerian Challenge: AR, VR & Immersive Apps
Deadline to Enter: January 8, 2019

Amazon has just launched the Amazon Sumerian Challenge, an online competition to create and publish AR, VR & immersive apps using Amazon Sumerian's browser-based IDE.

Participants who submit an eligible application will qualify for a chance to win part of over $100,000 in cash & prizes, including a virtual meeting with Sumerian product leadership team and judges.

Amazon Sumerian Hackathon
Create and publish AR, VR & immersive apps using Amazon Sumerian’s browser-based IDE

- Prizes: Over $100,000 in cash and prizes, including a 30-minute virtual meeting with Sumerian product leadership team and judges
- Deadline: January 8, 2019
- Learn more and register at amazonsumerian.devpost.com
NASA Florida Space Grant Consortium

The NASA Florida Space Grant Consortium is pleased to announce its 2018 - 2019 student hardware collaborative projects listed below.

1. **Hybrid Rocket Competition**

   The objective of the competition is to build and launch a hybrid powered rocket. There are two categories of competition to choose from. The first category consists of launching a hybrid rocket to the maximum altitude. The second category challenges the teams to fly their rocket closest to 2,000 feet in altitude.


2. **Florida University Satellite (FUNSAT) Design Competition**

   Design of a pico-satellite with a maximum mass of 1.33 Kg and the size of 10 x 10 x 10 cm$^3$ (i.e. 1U). Open to undergraduate and graduate students enrolled in a FSGC affiliated university.

   [https://floridaspacegrant.org/programs/funsat-design-competition/](https://floridaspacegrant.org/programs/funsat-design-competition/)

3. **Senior Design Projects and NASA Competitions**

   FSGC will be supporting senior design projects (up to $750 for each project), NASA Competition participation (up to $2000) and other competitions for the 2018-19 Academic Year. Priority will be given to NASA competitions.

   [https://floridaspacegrant.org/programs/senior-design-projects/](https://floridaspacegrant.org/programs/senior-design-projects/)

All these programs can also be accessed from the main FSGC web page

[http://www.floridaspacegrant.org](http://www.floridaspacegrant.org)

For any inquiries about the programs, please email jaydeep.mukherjee@ucf.edu
ColDesi R&D Open Position in Largo, FL

ColDesi is extremely proud to offer an amazing product line designed for the custom t-shirt, embroidery and apparel decorating businesses. We currently offer direct to garment printers, commercial embroidery machines, rhinestone machines and our innovative ProSpangle spangle transfer system. We are committed to helping beginners and established companies alike succeed in their business ventures by providing the equipment, offering the support, training and care needed to make them successful. In fact, ColDesi’s online and on-site training programs were recently highlighted in Stitches Magazine, a leading industry publication.

ColDesi R&D is located off Ulmerton Road in Largo, Florida. ColDesi is willing to pay well for project-based work and hopefully find someone who would complement their team for the long run. The projects we work on are mostly related to the apparel decorating industry, and we are currently on a path to develop IP and Hardware that significantly improve some of the big issues that face this industry.

ColDesi is looking for an individual who loves playing and developing robotic mechanisms. Any formal education in robotics and programming is a bonus. Brief notes on what we are looking for:

- Program Arduino hardware along with understanding C++ along with a basic understanding of how the hardware works.
- Directly work with electrical and mechanical engineers that will direct and guide them in R&D projects.
- They will aid in the development of machine software functions that will control various hardware listed:
  - Servo Motors (PWM Type)
  - Stepping Motors drives
  - Fluidics logic, pumps, valves
  - Sensors, Optical, Temperature
- An understanding or interest in inkjet mechanisms would be desirable but not necessary.

Click here to learn more about ColDesi: https://coldesi.com

Contact and send resume to President Scott Colman at scolman@coldesi.com for more information.
CAE Software Engineering Co-op Student

CAE is a global leader in training for the civil aviation, defense and security, and healthcare markets. Backed by a 70-year record of industry firsts, we continue to help define global training standards with our innovative virtual-to-live training solutions to make flying safer, maintain defense force readiness and enhance patient safety. We have the broadest global presence in the industry, with 8,000 employees, 160 sites and training locations in over 35 countries. Each year, we train more than 120,000 civil and defense crewmembers and thousands of healthcare professionals worldwide. www.cae.com

Role and Responsibilities

• Provide technical support to senior level engineers in design, test, documentation, and implementation
• Perform engineering tasks including writing and testing software, creating software tools, updating drawings and documentation
• Gather data and prepare reports as necessary
• Provide administrative and technical support to Engineering department
• Assist other departments, when needed

Qualifications and Education Requirements

• Must be enrolled in an accredited bachelor's degree (or higher level) college/university program in majoring in an Engineering discipline, preferably Software Engineering or Computer Science
• Must have a minimum GPA of 2.5
• Must be proficient with Microsoft Office products
• Must be familiar with C++ and/or C# programming languages
• Familiarity with SQL/Access database a plus
• Must be willing to learn new procedures and applications
• Must be able to compute rate, ratio and percent
• Must have good diagnostic and troubleshooting skills
• Must be detail oriented
• Must be customer service oriented
• Must be willing to learn new procedures and applications
• Must have excellent communication skills
• Must be able to work with minimal supervision

Pay Starting at $14 an hour
Hours: Part-time; at least 15 hours a week

• Positions: 58821, 58754, 58755, 58822, 58820
• Search under Tampa & Tampa, FL, USA
Questions: Contact Laura Shives, Laura.Shives@caemilusa.com
Axiros Part Time Paid Work Project

Knowledge of IoT is the main qualifier. People with IoT knowledge usually build IoT projects as a hobby or for school projects with development project kits called raspberry pi, or arduino.

It is likely to be a project that requires 4 hours per week for 4 weeks $20/hr from our office (we are by the Tampa Airport) – Any day/time between 9am and 4pm mon to Thursday.

Looking for:
- A student who is familiar with IoT (protocols, protocol roles, industry trends, industry players)
- From the college of engineering
- Comfortable using Microsoft power point

We have a few admin guides, we need to put together power points using the information from those admin guides.

No experience required with graphic design, we have a person for that. What we need is a person capable of understanding IoT acronyms, lingo, and capabilities (from a high level – theoretical – the big picture)

Respond with resume with these skills to: Henry J. Ortiz, Esq. Email: Henry.Ortiz@Axiros.com
Managing Consultant, Internet Of Things Solutions
Axiros North America, Inc.
Axiros.com | A Gartner Top 10 IoT Technology company
Mobile: +1-813-419-9440
Secure Funding Strategies Website Manager Position

Mail to:
Fred Schwartz
3530 Fiddlers Green Loop
Wesley Chapel, FL 33544

Company – Secure Funding Strategies
Location – Wesley Chapel
Hours – Flexible
Rate of Pay – Base plus bonus – Depending on experience and commitment

Description of Job/Title (Website Manager) – To assist and help manage the day to day workings of the website and generate traffic so we can fill our pipeline. We lend money to all different types of business’ and industries. SEO understanding a must as well as experience with Google and Facebook SEO. The goal is maximize effort to drive traffic to our site so we can assist the customer in securing the funds he/she needs to operate their business. The measurement of success will be getting the phone to ring or receiving of e-mails so we can start the loan origination process.

Contact Person –
Fred Schwartz
610-633-0202
Get Fast-Tracked for 2019 Jobs & Internships with IBM Through Uncubed

Interested in meeting experts at the intersection of Artificial Intelligence, Natural Language Processing & Machine Learning, and landing a job or internship with the company at the forefront of it all?

IBM & Uncubed are bringing together students looking for full-time opportunities in 2019 to learn about the future of AI: from reducing environmental pollution and predicting weather patterns to protecting public safety and personalizing education practices.

Events will take place this November across Atlanta, Boston, San Francisco, and Toronto -- travel & lodging provided (read FREE!)

(Not looking for a full-time position yet? Apply through Uncubed and get priority access to 2019 internships.)

Students will be selected through our application process -- we currently have full-time & internship positions available in Engineering & Development, Product Management, Design & UX, Data Science, and more!

Learn more and apply here.

Questions? Contact us at ibm@uncubed.com.
WebstaurantStore

NOW RECRUITING
Entry Level Software Engineers

Are you looking for the feel of a start-up, but the solid foundation of a well-established company?

Do you want to work on a variety of challenging projects using cutting-edge technologies?

Do you want to be an integral part of a core development team located right here in Tampa?

WE WANT TO MEET YOU!

See the Full Job Listing & Apply Online Today!
WebstaurantStore.com/Careers/
Entry Level Robotic Automation Consultant

Maantic Inc. is a leading boutique systems integration company and consulting firm that specializes in the implementation of business applications including BPM, CRM, ERP, EAI, and BI.

The company provides a full range of IT services customized to meet each client's specific needs and business objectives. We have clients in industries ranging from high technology, healthcare, biotechnology & pharmaceuticals, financial services, manufacturing, and communications & media. Maantic is dedicated to the cost-effective delivery of integrated IT solutions that achieve outstanding business success.

Maantic seeks dynamic individuals interested in making a career in the field of Robotics.

Summary:
Individuals with prior knowledge of Robotics/RPA/RDA is preferred but not required. Maantic will train and mentor the individuals hired to fill this role.

Job Description:
- Nice to have 1-2 years’ experience in Robotic Automation using Pega Robotics / OpenSpan, Automation Anywhere, UiPath, or Blue Prism
- Ability to become adept at RPA execution including requirements gathering, solution designing, coding, testing, debugging, documentation and implementation
- C# / .net development experience preferred
- Must have excellent communication skills
- Ability to multitask and work with international teams
- Be willing and able to quickly learn RPA design standards and principles to develop automation objects that are efficient, well structured, maintainable and easy to understand

Education:
Bachelor's Degree in Computer Science, Management of Information Systems, or related business discipline(s).

We offer:
Dynamic, exciting and collaborative work environment
Great benefits
Competitive compensation