Dear CSE Students:

Welcome to the first newsletter of the Fall 2018 semester.

**Message from the UG Advisor:** Welcome to fall 2018. Remember, USF has a first-day attendance policy. If you miss your first class, you could be dropped. The add-drop week ends on Friday, August 24th. Make sure your schedule is set before the end of the week. If you are still trying to fill your schedule, please visit a CSE advisor before add-drop ends. [https://www.usf.edu/engineering/cse/undergraduate/contacts.aspx](https://www.usf.edu/engineering/cse/undergraduate/contacts.aspx). Have a great semester!

**Message from the Grad Program Assistant:** Welcome Students! Please make sure that you have your schedules finalized by the end of the first week of classes (August 24 by 5PM). If you are a TA/RA this semester, make sure that your appointment is on GEMS by Friday, August 24. Otherwise, you will have to pay for your tuition fees and then be reimbursed once the tuition waiver kicks in. In addition, do not forget to submit your tuition waiver form by August 22. Students graduating Fall 2018, make sure you apply for graduation via OASIS by September 21. You will also have to submit a Graduation Checklist and Plan of Work directly to me. You can see me in ENB 342D if you have any questions. If you are defending your thesis or dissertation this semester, make sure you follow the deadlines closely. Visit the Electronic Thesis and Dissertation page found on our website for more details.

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

- COP 4931 Information Privacy for Trustworthy Cyber-Systems (Fall 2018)
- Career Services to CSE Students: Resumes, Interviews, and ePortfolios
- CSE Hiring Federal Work Study Front Desk Student Assistant
- CARRT Research Assistant Position Open
- Secure Funding Strategies Website Manager Position
- Axiros Part Time Paid Work Project
- Sofwerx Remote Data Science Intern Volunteer Position
- Student Cyber Challenge September 19, 2018
- MindSumo and Wells Fargo Campus Analytics Challenge
- CBM 2019 6th International Conference on Computational Biomedicine
- National Student Directory with Pathways to Science
- Tech USA Software Developers and QA Analytics Full Time Positions
- Plasma-Therm Full Time Positions
- FairWarning Product Developer Full Time Position

Regards,

Ken Christensen
Professor and Associate Chair of UG Affairs
COP 4931 Information Privacy for Trustworthy Cyber-Systems (Fall 2018)

TR 3:30 - 4:45pm, BSN 1301

This course is opened for CyS and IT students, counted as Departmental Elective

Instructor: Attila A Yavuz (attilaayavuz@usf.edu)

Course description: This course covers foundational concepts, algorithms, protocols and tools to enhance information privacy for trustworthy computing systems, with a clear emphasis on both theoretical concepts and practical applications, and impact. This course captures basic concepts and techniques in information privacy such as risks and vulnerabilities, applied cryptography and various cyber-security security protocols. This course also explores fundamental techniques including access control, IEEE standards (e.g., digital signatures, public key encryption), authentication protocols, group key establishment and management. Finally, it covers some emerging topics in information privacy such as privacy-preserving and functional cloud storage (e.g., Private Information Retrieval, Searchable Encryption), location-privacy in cognitive radios and secure attestation.

- Cryptographic libraries (C/C++) to secure emerging computing systems
- Ability to understand and implement cryptographic standards in industry
- Ability to analyze, test and implement foundational information privacy services
- Security for Internet of Things and Systems (IoTS)
- Implementation of Counter Denial of Service Techniques
- Cryptographic Digital Forensic Schemes
- Cloud computing is a key technology trend, but with many cyber-security challenges:
  - How can we achieve the privacy and utilization of data on computing clouds?
  - How to search, analyze and retrieve on encrypted data?
- Security and privacy on emerging wireless systems, location privacy.
- How to guarantee the security and reliability of computing clouds?

By the end of this course, successful students will have a good understanding of cyber-security and information privacy essentials, which will help them as a differentiating factor to obtain competitive R&D positions in industry. Furthermore, the students will gain experience on conducting research and implementation of various cryptographic standards.

Please see:

http://www.csee.usf.edu/~attilaayavuz/Courses/Fall2018USF/Syllabi/Syllabus_COP4931.pdf
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
NOW HIRING!
FWS STUDENT ASSISTANT

The Department of Computer Science and Engineering is looking to hire a front desk assistant.

Apply Today!

- 10-20 hours a week
- flexible hours
- open to all majors

Questions?

Email Mayra at mayra1@usf.edu or call at 813-974-2274.
Research Assistant Position Open

CARRT is looking for a senior undergraduate or a graduate student who can work on the Virtual Reality for Vocational Rehabilitation (VR4VR) project. The student will be working on the development and programming of virtual reality modules for the project, and will be recruiting and testing subjects with cognitive disabilities (Autism, TBI, etc.) on the modules that are already developed. The student will need to commit to work on this project a minimum of 20 hours a week for one year. A generous stipend will be provided based on the applicant’s credentials. Tuition waiver will be provided if the applicant is a graduate student. The qualifications needed for this position are as follows:

**Technical Qualifications:**
- Experienced with Unity game engine and C#
- Experienced with virtual reality applications and development
- Experienced with mobile application development (Android and iOS)
- Strong 3D math skills (linear algebra, vector math)
- Knowledge of database tools such as mySQL
- Familiarity with Maya, 3D Max and likewise modeling and animation tools

**Personal Characteristics:**
- Good analytical and problem solving skills
- Quick learning
- Ability to adapt to changing processes
- Well organized
- Friendly and patient character to work with persons with cognitive disabilities
- Can work with and collaborate with others
- Can pay attention to details

If you feel that you are qualified for the position, please email your resume to: Dr. Redwan Alqasemi: alqasemi@usf.edu
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
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
Remote Data Science Intern

SOFWERX was established under a Partnership Intermediary Agreement (PIA) between the United States Special Operations Command (USSOCOM) and the Doolittle Institute (DI) DBA DEFENSEWERX (DWX). SOFWERX is a platform designed and operated to increase collaboration and innovation, as well as explore, experiment and assess promising technology for USSOCOM. Its growing eco-system includes both traditional and non-traditional problem solvers with a focus on new, novel and provocative capabilities.

Requirements:
- Able to work 15-20 hours a week
- Quick Learner
- Willing to learn software like Github and Docker
- Works well on remote teams while demonstrating independence
- Passion for Data Science, Machine Learning, Natural Language Processing, and Computer Vision
- Past projects in Threat Detection, Virtual Assistant, Chatbot, Cyber Security, Geospatial

Qualifications:
- Requirements:
- Will need to attend remote weekly hour Friday meeting
- Will need to submit a resume
- Code examples via Github link
- Background check
- 9/1/2018 to 12/15/2018
- Located in the United States

Note: This is a volunteer/unpaid internship

Apply by sending your resume to: swx.intern.volunteer@sofwerx.org by 24 August 2018
STUDENT CYBER CHALLENGE
Global Aviation is under attack. What do you do?

1. Digital Forensics
2. Web Exploitation
3. Binary Exploitation

The global aviation network is under attack. Aircraft messaging, ticketing systems, flight information displays, and more, have all been comprised. It is up to your team to research, investigate, and produce the flag—the mitigation solution.

Mentors from the aviation industry will be on site and may provide hints . . . for a cost . . .

Five challenge categories will be offered:
1. Digital Forensics
2. Web Exploitation
3. Binary Exploitation
4. Networking
5. Cryptography

Educators from Embry-Riddle Aeronautical University will facilitate the exercise. Cyber analysts from leading aviation companies will be on-site to serve as mentors. A Symantec representative will also serve as a mentor.

Team Prizes (prizes to be awarded September 20)
1st: $2,100  2nd: 1,500  3rd: $900

Additional prizes provided by Symantec.

September 19, 2018 ~ Gaylord Palms, Orlando

Format

Challenge Host

The Student Cyber Challenge will be held in conjunction with the Aviation ISAC Annual Summit.

The Aviation ISAC is the global aviation cyber threat sharing membership association. Aviation companies around the world join the A-ISAC to collaborate and share threats against the global aviation infrastructure.

To register, email: phart@a-isac.com
MindSumo and Wells Fargo Campus Analytics Challenge

MindSumo just partnered with Wells Fargo for their 2018 Campus Analytics Challenge!

MindSumo is a platform that provides real company projects for college students to help them develop professional skills and valuable experiences for resumes. We have worked with over 350 companies in the past and have over 300,000 students in our community.

This Wells Fargo challenge is set to launch in the second week of September. Review last year’s challenge and get an idea of what this year’s challenge could entail, here’s a link: [https://www.mindsumo.com/contests/building-better](https://www.mindsumo.com/contests/building-better)
CBM 2019
6th International Conference On Computational Biomedicine

February 7th and 8th
8:00 AM - 4:30 PM
J. Wayne Reitz Union

Organizers:
Dr. Panos M. Pardalos
Dr. George Michailidis

http://caopt.com/CBM2019/

Informatics Institute
University of Florida
The 6th International Conference on Computational Biomedicine

A primary goal of the CBM 2019 is to bring together scientists, engineers, mathematicians and patricians from a variety of related disciplines, to exchange ideas and present original research results in the theory and applications of computational biomedicine. It is hoped that most countries will have a delegation to participate this event. The conference will be composed of featured symposia, plenary lectures, invited sessions, and contributed sessions.

For more information, please visit [http://caopt.com/CBM2019/](http://caopt.com/CBM2019/).

February 7\textsuperscript{th} and 8\textsuperscript{th}
8:00 AM – 4:30 PM
J. Wayne Reitz Union
University of Florida, Gainesville, Florida

We hope to see you there!

Register
National Student Directory with Pathways to Science

Students can sign up online to be added to the directory and notified of programs and funding opportunities (NSF, NASA, etc.) relevant to their disciplinary interests and level of study. Directory members receive 4-6 emails per year notifying them of relevant opportunities.

We encourage STEM students to join and many summer research programs find it valuable to forward our sign-up form to their students.

http://www.pathwaystoscience.org/form.aspx
Attention Computer Science Graduates

Are you a recent grad looking for a career with a local Software Development company that has an amazing culture and unlimited opportunity for growth in Tampa? Tech USA is currently seeking several Software Developers and QA Analysts for direct-hire positions with competitive pay and benefits. No formal work experience is required to come be a part of this dynamic and diverse team of people with a passion for development. Our client is a multimillion-dollar leader in their industry known for innovation and changing the status quo.

Don’t miss this great opportunity and apply today!

JOB DESCRIPTIONS & REQUIREMENTS

- Designs, modifies, develops, writes and implements software programming applications
- Supports and/or installs software applications
- Diagnoses issues in software applications and environments
- Participates in the testing process through test review and analysis, test witnessing and certification of software
- Interacts with colleagues and/or partners through a variety of mediums to provide support and understand needs
- Develop various tools and customizations within the core product and to increase day-to-day efficiency
- Maintain infrastructure to ensure smooth operations

QUALIFICATIONS

- Bachelor’s in Computer Science or related field preferred
- Strong desire to learn and grow within a team environment
- Software/Web development experience utilizing object-oriented languages
- Understanding of a Scrum or Agile environment
- Knowledge of Software Development Life Cycle
- Experience with ASP.Net, SQL Server a Plus
- Experience with JavaScript, HTML, CSS a Plus
- Experience with Hardware/Networks/Servers a Plus

For more detailed information or to schedule an interview, please send your resume to Andrew Mastrone at amastrone@techusa.net with the subject “Dev/QA”.
At Plasma-Therm, we take pride in our Employees! Encouraged by an energetic environment, our team shares a common commitment to innovation and creativity. With 50% growth over the past few years, we are looking to enhance our group with talented, driven individuals who look beyond yesterday’s routine to enhance tomorrow’s solutions. To learn more about Plasma-Therm and our opportunities, go to our job openings at: [http://www.plasmatherm.com/careers/find-jobs.html](http://www.plasmatherm.com/careers/find-jobs.html). Below is a brief summary of our current openings.

**CONTROLS SPECIALIST I, II or III:** Provides both hardware and software support utilizing an in-depth understanding of mechanical, electromechanical, and software engineering. Coordinates activities involved in the system integration process to realize system development.

**ELECTRICAL ENGINEER I & II:** Researches, plans, and designs electrical and electromechanical products and systems, and coordinates activities involved in the documentation, drafting and design process of electrical or electromechanical products and systems.

**FIELD SERVICE TECHNICAL WRITER/TRAINER:** Documents and edits material procedures, updates equipment manuals, develops installation manuals. Plans, creates, coordinates and delivers technical training and documentation to the internal Technical team. May on occasion be required perform various product line training with Customers

**INSIDE SALES MANAGER:** Supports the outside sales organization by gathering, compiling and transmitting information and documentation to the field as required from inquiry through PO package generation including system configuration confirmation (CCD). Responsible for defined territory revenue and contributed margin through the sale of new and refurbished systems as well as retrofits and upgrades.

**MECHANICAL ENGINEER II or III:** Researches, plans, and designs mechanical and electromechanical products and systems, and coordinates activities involved in the drafting and design process of mechanical or electromechanical products and systems.

**PROCESS ENGINEER II & III or IV** Responsible for process development of plasma based etch and deposition processes for a variety of materials and applications. Ability to independently design, develop and test processes based on requirements set forth by Plasma-Therm or Plasma-Therm’s customers is important. Projects will be both individual and as part of a project team. Effective communication, internally within Plasma-Therm and externally with customers is required.

**PRODUCT MANAGER:** Manages product planning and marketing for capital equipment products throughout the product lifecycle

**PROJECT MANAGER:** Plans, tracks and coordinates the execution of projects arising out of Plasma-Therm’s customer partnerships and customer support activities. Acts as the primary liaison between Plasma-Therm team and its customers for assigned projects. Coordinates customer communication as required in support of customer support activities. Acts as the liaison between Plasma-Therm and its customer partners for all project activities. Organizes team leaders and engineers to define project goals, schedule and budget. Manages problem resolution through appropriate means and escalates when appropriate. Communicates status to internal account executives.

**SOFTWARE/CONTROLS ENGINEER II:** Researches, designs, and develops computer software systems, focusing on programmable logic controller, working in conjunction with hardware product development.
Product Developer

PRODUCT DEVELOPMENT | CLEARWATER

FairWarning is hiring Software Product Developer to scale-up the growth of our patented, market leading product platform. FairWarning solutions protect organizations of all sizes against data theft and misuse in Electronic Health Records (EHRs), Salesforce, Office 365, and hundreds of other applications through real-time and continuous user activity monitoring leveraging a combination of user behavioral analytics and machine learning algorithms.

Below is more about our customer base and what the role entails:

- Global customer base covering North America, Europe, and Asia Pacific
- 40% of the US-based healthcare market with the largest and most complex care providers, including 38% of academic medical centers, 50% of Backer’s Top 54 largest health systems, and 53% of Most Wired health systems
- Cloud Security customers represent $550 billion in assets under management within Financial Services, Wealth Management, Banks, legal, and entertainment industries
- Ensure “always on” Patient Privacy Intelligence through the use, maintenance and development of automated “Self-Healing” products and services
- Contribute to the system architecture, design, and development of the JavaEE Application through hands-on software development, design and code reviews, documentation, and implementation processes
- Provide hands-on database development using Oracle MySQL
- Participate in hands-on development of real-time streaming, complex analytics, and machine learning using the latest open source technologies
- Implement new innovative tools and processes to improve performance and processes of our software platform
- Participate in Product Release Management through attending Daily Scrum, Backlog Grooming, Sprint Planning, and End of Cycle meetings
- Contribute to Continuous Integration Testing development environment by designing, coding and unit testing
- Support production customers on an as needed basis

Description of Role

In this role, you will be able to make major contributions to the product platform. Responsibilities include providing hands-on software development, participation in design and code reviews, and documentation of designs and implementation of methodologies to ensure high quality products. Additionally, this role will improve our customer support and deployment model through software improvements.

- **Great Listener.** A successful candidate actively listens to customers through daily communication to collect feedback about their experience, usage, and solution ideas
- **Team Player.** A successful candidate will develop excellent working relationships with Solution Specialists, Implementation Managers, and other FairWarning team
members to ensure a superior onboarding and ongoing experience for customers to achieve their program goals and optimize their investments with FairWarning

- **Problem Solver.** A successful candidate can quickly and clearly identify issues impacting the value customers are experiencing from their solution and determine the next steps to resolve it.
- **Communication.** A successful candidate can speak and write professionally to be clearly understood and positively influence team members to assist the customer
- **Customer-Centric.** A successful candidate focuses on making their customers successful by listening and discovering their business goals, proactively identify and resolve challenges, and promoting FairWarning's solutions and services throughout the entire relationship they have with the customer

**Background**

- Bachelor's Degree in Computer Science or Computer Engineering, related degree or equivalent work experience
- Experience in software development or product development environment with a successful coding and development track record
- Strong technical ability in high level programming language such as Java or C#
- Strong database skills including data modeling, administration, configuration, SQL, performance tuning. Experience with Oracle MySQL preferred.
- Experience with Linux/UNIX operating system and shell scripting (Perl, Bash, Korn)
- Ability to work in team-based setting with strong verbal and written communication skills
- Experience with Hadoop and other Big Data technologies such as Spark and Kafka is a plus
- Experience with Healthcare, Information Security, Cybersecurity, SaaS solutions, Managed Services preferred

**Characteristics of Successful Candidates**

FairWarning operates a customer-centric business model with strong teamwork across the business. FairWarning’s philosophies begin with listening and problem solving for our customers. As such, successful candidates have the following characteristics:

- Ability to work in a fast-paced environment
- Attention to detail
- Persistent and competitive
- Relentless learner
- Self-Motivated
- Creative problem solver with the ability to address issues quickly and effectively
- Consistently positive and highly self-motivated
- Ability to understand business problems and build business friendly products and solutions
- Outstanding listening and discovery skills
• Committed to being an active team member who is committed to personal and professional development by participating in formal technical training, product training, cloud security training, and leadership training
• Both team player who buys into FairWarning Values and the “FairWarning Way”, as well as individual contributor

Additional Information About FairWarning and the Opportunity
• FairWarning has a proven track record of developing, selling and servicing patented, market-leading product and service offerings
• FairWarning has been voted a Top Workplace for six (6) consecutive years
• Proven, stable and profitable for ten consecutive years
• Successfully executing on unique & differentiated vision of radically simplifying cloud security
• Multiple patents and trademarks on FairWarning product technology
• Multi-billion dollar growth market for FairWarning’s cloud security offering