UNIVERSITY OF SOUTH FLORIDA

CSE Student Newsletter

September 29, 2021 – Volume 11, Issue 19

Computer Science and Engineering
University of South Florida
Tampa, Florida
http://www.cse.usf.edu

Dear CSE Students:

Welcome to the first newsletter of the Fall 2021 semester.

Message from the UG Advisor: Spring registration begins on November 1st. Our updated advising schedule has been posted on the CSE website. Get your advising questions answered now, before the rush. **Spring 2022 graduates—**your graduation checklist is due by the deadline of October 29th. Do not wait until the last minute to submit your checklist. Graduation checkout appointments with Ms. Mayra Morfin begin Monday, October 4th. Please meet with a CSE advisor to review your plan and to qualify for permits for any of these three courses. You may have received a notice last week about updates to Degreeworks due to consolidation. See a CSE advisor if you have questions about what you see in Degreeworks.

Message from the Grad Program Assistant: October 8 - Tuition payments due for graduate assistants with tuition waivers, students with billed Florida prepaid tuition plans or with financial aid deferments to avoid $100 late payment fee. We are working on tuition waivers now. As you know, it is a lengthy process, and the Department only handles the first step. Please check your account. If your waiver has not been processed by **Oct. 1**, please let me know and I will follow up. **November 24** - Deadline for PhD students to submit the committee form if they plan to present their major area paper this semester. This is the College deadline, so please get them to me at least a day or two earlier. **December 9** - The deadline to submit the admission to candidacy form. This is the Grad Studies deadline, so please know that you must do your major area presentation, complete all the paperwork, and submit it all to me at least a few days prior, so that I have time to process it. You must be admitted into candidacy before you can take dissertation hours and you must complete the major area presentation before you can apply for candidacy. All admission to candidacy forms submitted by the deadline will be processed, so that students can begin taking dissertation the following semester.


Please note that the below listing does *not* imply University or Department endorsement:

- Undergraduate Research Opportunity with USF Quantum Initiative
- USF Water Institute – Applications Developer II - .NET Web Developer
- Fall 2021 Graduation Reminders (for graduate students)
- Robins Air Force Base Software Engineering Group Opportunity
- U.S. Fleet Forces Command (USFFC) Career Opportunities
- Citi Bank – Upcoming Career Ready Workshop Events
- Backend or Full-Stack Developer Freelance Opportunity
- USF Hispanic Heritage Celebration Poster Contest 2021
- USF Hispanic Heritage Celebration Poster Contest 2021 Application

Regards,

Ken Christensen
Professor and Associate Chair of UG Affairs
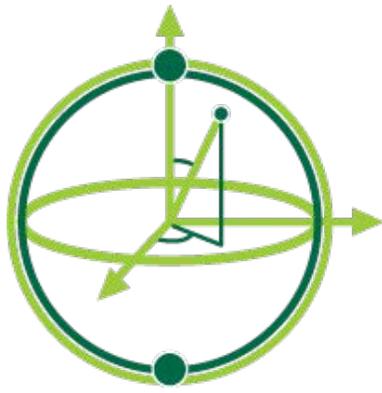
We are looking for a student for a "Research Experience for Undergraduates" position in the newly formed USF Quantum Initiative. In this role, the successful candidate will perform tasks associated with research and assist with operations (such as updating websites).

- The position requires a commitment of 10 hours/week and will pay $15/hr.

- You might be able to get credit hours towards your degree for the REU experience.

- Any student who has completed Data Structures is eligible to apply.

- Preference will be given to computer science or computer engineering students who have successfully completed courses in quantum computing or networking.

If you are interested, please email your CV to Dr. Richard Rauscher rrauscher@usf.edu ASAP. Appointments can start this semester.

Applications Developer II - .NET Web Developer

Job ID: 28400

USF Water Institute (https://waterinstitute.usf.edu)
Geosciences, University of South Florida
Tampa, FL

Hiring Salary Range: $60,000 – 70,000 annually

ORGANIZATIONAL SUMMARY: The University of South Florida Water Institute is a research center affiliated with the School of Geosciences at the University of South Florida. The Water Institute leverages the talents of students and faculty from throughout the University to address complex water-related issues. The Water Institute facilitates innovative multidisciplinary research, education and public outreach efforts that assist public and private sector agencies and organizations within the State of Florida, the nation and the world. The core staff of the Water Institute work as a 6-7 person team of web, database and GIS developers (plus students) to create and manage several online data-driven web applications that provide comprehensive data resource that helps citizens and scientists alike make informed decisions concerning environmental resources (see Water Institute Websites at https://waterinstitute.usf.edu/). The Water Institute values a flexible work environment, a commitment to a healthy work-life balance for all staff, support for continuing education and pursuit of advanced degrees, and the benefits package is exceptional.

POSITION SUMMARY: This .NET Web Developer position is responsible for the design, architecture and implementation of database-driven website applications for the USF Water Institute, including: wateratlas.org; plantatlas.org; dev.seacar.usf.edu; water-cat.org; terra-cat.org; and waterinstitute.usf.edu. The position also manages the server infrastructure required to support the applications. This position utilizes a range of programming techniques, including: C# .NET, Javascript, MS SQL server, Internet Information Systems, Python, Git, Powershell and Azure DevOps. The position supervises student assistants.

RESPONSIBILITIES:

- Develop and test new software for research needs making use of the latest technologies including but not limited to C# .NET, Javascript, ANSI SQL or T-SQL, MS SQL server, Internet Information Systems, Python, GIT, Powershell and Azure DevOps. Examine tradeoffs and capabilities of different platforms and propose solutions that prioritize long-term goals of the project, including maintainability and security.
- Build and maintain deployment pipelines for research software applications, including Continuous Integration, Continuous Deployment and Health Monitoring. Manage and architect computer server infrastructure to support website applications (i.e., Azure virtual server infrastructure).
- Provide maintenance and support for existing software applications including bug fixes and scalability issues. Develop Strategies to improve longevity of applications, including creating re-usable frameworks/libraries that can be shared between applications, and re-architecting applications to improve maintainability.

- Gather and analyze new software requirements; estimate costs; provide project timelines; and design system architecture for the new requirements.
- Works with team members to coordinate with internal and external stakeholders, including state and local governments to identify software design requirements and verify software functionality.
- Helps research and learn emerging technology solutions that can be used to improve existing software and streamline new software development.

Minimum Qualifications: Bachelor's degree in Computer Science, MIS or other field involving software and analytical training and two years of IT related work experience; or a Bachelor's degree with no specific required field and three years of IT related work experience, OR a Master's degree and one year of IT related work experience, OR a combination of six years of IT related work experience and validated training. Preparation for a relevant IT certification is considered to be related training.

Preferred Qualifications:

- Authorization to work in the US without a need for visa sponsorship to continue working in the United States.
- Documented training and experience with a range of programming techniques, including: C# .NET (4.x and Core 3.1), Javascript (jQuery, ES6), CSS, MS SQL server, Internet Information Systems, Python, GIT, and Azure DevOps. Experience in creating and maintaining CI/CD pipelines for automated deployment.
    - o 5+ years experience with back-end Web Programming in C#.
    - o 5+ years with front-end Web Programming in JavaScript with a familiarity using multiple libraries including jQuery, Leaflet, React, KnockoutJS etc.
    - o 2-3 years with database design procedures.
    - o 1-2 years using Devops.

How To Apply:

1. Select the below link to access our careers site.
2. Sign In to access your account or if you are not an existing user select the New User link to create one.
3. Search for the Job ID 28400 or position title "Applications Developer II"
4. Review the job description and select the Apply button to begin your application.

https://www.usf.edu/work-at-usf/careers/browse-apply-for-job-openings.aspx

SWEG MISSION AND VISION STATEMENT

MISSION: Advance Air Force superiority by providing world-class, innovative and dynamic software products and services.

VISION: To be the industry leader in providing Department of Defense (DoD) software products and services.

Goals:

(1) Institutionalize standard processes for executing 402 SWEG activities

(2) Strengthen relationship with mission partners and Software Enterprise

(3) Create and maintain an organization that delivers products and services based on its operating process with the agility to adapt to dynamic workload factors

(4) Promote a professional work environment

402d Software Engineering Group
420 Richard Ray Blvd., Ste 100
Robins AFB, GA 31098

ROBINS AIR FORCE BASE
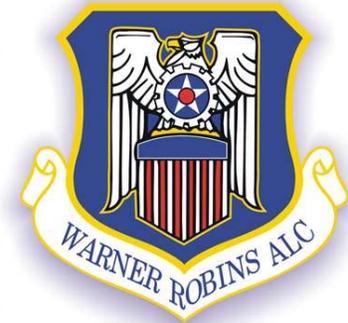
SOFTWARE ENGINEERING GROUP

AT

Warner Robins Air Logistics Complex

TELEPHONE: (478) 926-2457
WARNER ROBINS, GA

U.S. AIR FORCE

402D SOFTWARE ENGINEERING GROUP

U.S. AIR FORCE

WHO ARE WE?

THE 402d SOFTWARE ENGINEERING GROUP (SWEG) is located at Robins Air Force Base in Warner Robins, Georgia. The group is staffed with over 1,200 personnel experienced in electrical engineering, computer engineering, computer science, and information technology. With over 420,00 square feet of facilities, SWEG is the largest industrial complex in the state of Georgia.

WHAT DO WE DO?

The 402d Software Engineering Group performs software changes on real time software systems located in various platforms including aircraft, drones, ships and hundreds of related systems. We maintain sites used to remotely control drones. We build and deploy equipment used to test and diagnose hardware failures in systems and write the diagnostic software used on the equipment. We also Business Enterprise Systems and apps to include worldwide inventory management systems and electronic logs used by air crews for takeoff, landing and loading data.

To fulfill our mission in being a premier software provider for DoD and NATO, we design and maintain one-of-a-kind system integration labs consisting of software and hardware –in-the-loop. We also provide engineering services such as system acquisition, software acquisition consulting, and life-cycle support.

WHAT DO WE OFFER?

EDUCATIONAL OPPORTUNITIES

◊ Advanced degrees with fully paid tuition (technical & non-technical degrees)

◊ Opportunities for Professional Military Education (SOS, ACSC, AWC)

◊ Paid training for certifications (Security+, etc.)

◊ Acquisition Professional Development Program (APDP) opportunities

LEAVE

Annual Leave

◊ 0-3 years of federal service earns 4 hours per pay period

◊ 3-14 years of federal service earns 6 hours per pay period

◊ 15 + years of federal service earns 8 hours per pay period

◊ Employees can carry over 240 hours of annual leave from one year to the next

Sick Leave

◊ All employees earn 4 hours per pay period

◊ Employees can carry over as many hours of sick leave as they want

Paid Holidays

◊ Currently, there are 10 paid federal holidays per year

S&E RECRUITMENT INCENTIVES

◊ 25% Signing Bonus

◊ $30,000 Over 3 Years

MILITARY BUY BACK

◊ Generally, a period of military service is creditable for retirement under the Federal Employee Retirement System.

PAY CYCLE

◊ Paid every two weeks; 26 pay periods per year

DUTY HOURS

◊ Standard 8 hour work day

◊ Flex time

◊ Flexible reporting hours between 6am and 9am available

OVERTIME/COMP TIME OPPORTUNITIES

◊ Paid Overtime / Compensatory time for hours worked beyond the 8 hour day.

SECURITY

402 SWEG personnel are required to obtain and maintain a minimum of secret security clearance

U.S. Fleet Forces Command (USFFC) Career Opportunities

The Department of Navy would like to partner with the University of South Florida in recognition of the vital role that science, mathematics and engineering education play in the United States defense posture, future viability and wellbeing. U.S. Fleet Forces Command (USFFC) would like to offer opportunities to your student body in the following career fields:

- Accounting/Finance
- Contracting
- Budget
- Information Technology
- Information Security
- Policy and Planning
- Cyber Security
- Networks
- Applications Software
- Operating Systems
- Customer Support
- Data Management
- Systems Administration
- Architecture
- Engineering- Computer, Electrical, Electronics, Chemical, General, Nuclear, Marine, Environmental, etc.
- Computer Scientist
- Cyber Operational Planners

USFFC commands, train, certify and provide combat-ready forces to combatant commanders that are capable of conducting prompt, sustained naval, joint and combined operations in support of U.S. national interests offering exciting civilian career opportunities. These are critical civilian workforce positions that provide a wide range of roles in support of the mission. We offer competitive entry-level salaries ranging from $43,683 - $78,167 with vacancies throughout the United States to include but not limited to the Hampton Roads, San Diego, Georgia, Mississippi, and Ft. Meade area.

We would like the opportunity to offer positions to recent graduates or students graduating within the next 12 months. Students or graduates should send resumes directly to me at lisa.mccall@navy.mil

These are Federal Civilian positions with no active-duty military obligation

Last year , we helped more than 200 million customers all over the world make their own kind of progress.

What progress will you make?

UPCOMING CAREER READY WORKSHOP EVENTS

Citi Recruiting 101: Meet Our Recruiters

Do you have questions that you'd like to ask a Citi recruiter? Join Citi for this informational session that will allow for you to connect directly with our recruitment team. Our recruiters will provide a general overview of Citi's recruiting process and timelines, what students can do now to prepare for the interview process, a quick overview of different divisions at the firm, and what sets Citi apart from other banks.

Date/Time: September 17, 2021 | 12:00 PM-1:00 PM EST   Click here to register

Building a Good First Impression

Do you want to make a great first impression, but aren't sure how to do so in a virtual recruiting environment? First impressions count, and while the impression you make can change over time, you can only make that first impression once. This session will help you to make a great first impression in a virtual environment. You will be introduced to a simple model for an impactful first impression every time and have the chance to give and receive feedback to help you grow and develop.

Date/Time: September 24, 2021 | 12:00 PM-1:00 PM EST   Click here to register

The Power of Networking

Are you curious about how to foster and leverage the power of networking? Please join us for a candidate workshop on networking! During this session, you will hear from current Citi business representatives on ways they utilized their networks while in school, and to build and expand their careers at Citi. We will also highlight actions and tips you can bring to your next networking event!

Date/Time: October 1, 2021 | 12:00 PM-1:00 PM EST   Click here to register

Find Your Place at Citi

Did you know that you don't have to be business major to work at Citi? Join Citi for this informational session to learn more about how you can find your place at Citi, no matter what your major, background, or area of interest. This is an opportunity to hear from Citi employees who entered financial services without a business degree and from untraditional backgrounds. Learn more about how to leverage your current skillset and apply it to financial services.

Date/Time: October 8, 2021 | 12:00 PM-1:00 PM EST   Click here to register

careers.citi.com

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citi

Welcome what's next

Diversity & Inclusion: Get to Know Our Employee Networks

Diversity is a key business imperative and a source of strength at Citi. Our goal is to have our workforce reflect this same diversity at all levels. Citi has made it a priority to foster a culture where the best people want to work, where we value and demand respect for others and where opportunities to develop are widely available to all. Citi employees enjoy a strong sense of community through our Affinity Networks. Join our workshop to learn more about the Affinity Groups and Employee Networks at Citi.

Date/Time: October 22, 2021 | 12:00 PM-1:00 PM EST   Click here to register

Resume Building 101 & Interview Basics

Join our Resume Building and Interview Basics workshop to learn more about the do's and don'ts of a resume, what stands out to recruiters, and how to prepare for the interview. You will learn about the different types of questions asked during an interview including how soft skills and technical skills are evaluated, what you can do leading up to the interview to prepare, and how to make sure your resume is interview-ready!

Date/Time: October 29, 2021 | 12:00 PM-1:00 PM EST   Click here to register

Crushing the Technicals

New to the technical questions that come along with finance interviews? This informal session will review some of the questions you can expect in Wall Street interviews as well some tips, best practices, and do's and don'ts for these questions. This is a great way to hear from real interviewers and those who recently went through the interview process, so you can feel prepared to crush your technical interview for Technology, Banking, and Markets!

Date/Time: November 5, 2021 | 12:00 PM-1:00 PM EST   Click here to register

A Day in the Life of an Analyst

Are you curious about what a day in the life of an analyst at Citi actually looks like? Join Citi as we have analysts across all businesses talk about their day to day responsibilities and what it takes to get the job in their line of business. This informal panel discussion will be a great opportunity to ask any and all questions about life at Citi from people who were in your shoes not too long ago!

Date/Time: November 12, 2021 | 12:00 PM-1:00 PM EST   Click here to register

From the Locker Room to the Boardroom

Don't just prepare for game day, prepare for your career too! Hear from former student-athletes at Citi and learn how to prepare for your career. During this session you will hear from former Citi Interns and current business representatives on how your skills on the field and court are transferable to roles at Citi.

Date/Time: November 19, 2021 | 12:00 PM-1:00 PM EST   Click here to register

Personal Financial Management

Do you want to learn how to take charge of your personal finances? Join our Personal Financial Management session to learn foundations for saving, budgeting, and building credit. Learn the best practices for college students and new graduates to be financially literate.

Date/Time: November 30, 2021 | 12:00 PM-1:00 PM EST   Click here to register

Job Description

Educational software that addresses the homeschooling and micro-schooling market is expanding as more parents are opting to take schooling into their own capable hands. These parents are typically highly educated themselves, tech-savvy and eager to maintain high educational standards. Our start-up company has identified an opportunity that will help parents and their children contextualize their educational journey, via a subscription-based piece of online software. We are looking for a Back-end or Full-Stack Developer to help bring this educational software idea to life. Front-end developers interested in this opportunity may submit applications for future consideration.

Our team has completed product specifications, Wireframed much of the front-end layout and has been developing a desktop GUI application (Python/PyQt**).** The ideal candidate will be capable of not only handling the technical requirements, but also interested in contributing ideas and improving user-experience. Knowledge of the education industry or educational software is not required.

This is a freelance position. Job scope will depend on applicant's abilities. Renumeration will match the candidate's capabilities, including possible equity positions after a probationary period.

Applicants in Florida will be given preference, but anyone is welcome to apply.

Objectives of this Role

Our current focus is improving an existing GUI prototype and then converting it to a server-client architecture, adding functionality, and managing user inputs (collection, organization, recall). Although the applicant will be guided by the existing GUI prototype to hash out a web application, they will be given much autonomy in driving the project.

Future needs include: account management (add user, account setting, etc.), payment/subscription management, scaled web hosting

Responsibilities

- Write clean code to develop functional web applications
- Build prototypes, solves issues, profile and analyze bottlenecks
- Perform UI tests to optimize performance
- Gather and address technical and design requirements
- Build reusable code and libraries for future use

Required Skills and Qualifications

- Hands on experience with programming languages like Python, Ruby, PHP, JavaScript, or similar
- Working knowledge of CMS framework
- Experience with Git Repositories

Submit Resumes to: chrisgarrett35@protonmail.com

Artist: Allen Stephens
2020 Poster Contest Winner
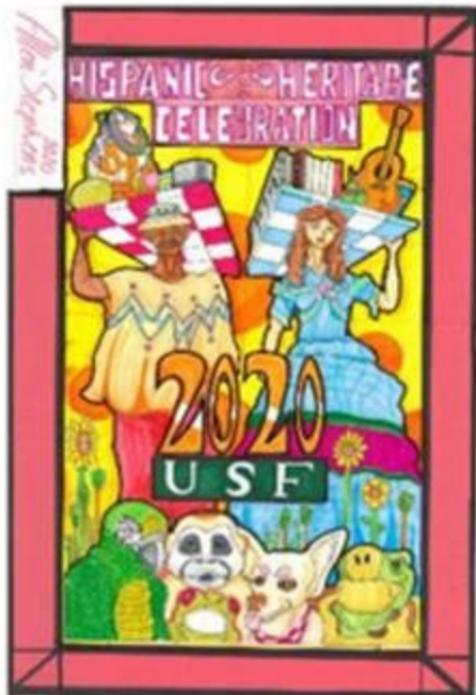
USF Hispanic Heritage Celebration

POSTER CONTEST

$300 Prize

Please review Poster Contest Application for details

DEADLINE FOR ENTRY: Friday, October 1, 2021

Questions regarding contest, please contact: lorelly@usf.edu

SOL Status of Latinos Committee

UNIVERSITY of
SOUTH FLORIDA

S☀L Status of Latinos Committee

USF Hispanic Heritage Celebration
Poster Contest 2021

$300 Prize

Application

Name (PRINT): _____

Address: _____

Phone: _____ **Email Address:** _____

ALL ENTRIES ARE SUBJECT TO THE FOLLOWING RULES AND CONDITIONS OF THE CONTEST:

1. Only one poster may be submitted per artist.

2. Contestants include USF students, staff and faculty.

3. Poster should include the following:

    a) The artist signature on the poster.
    b) Paint, oils, pencils, markers, or graphic generated art.
    c) 11x17 inches dimensions, vertical design orientation.
    d) The artist's interpretation or rendition of Hispanic Heritage. Artists using graphic generated art are responsible for abiding by the copyright rules.

4. The winner will be selected by the USF Hispanic Heritage Celebration Committee members and will be notified by email. Poster will be featured at the **USF Hispanic Heritage Awards 2021 Virtual Celebration.**

5. **DEADLINE: Friday, October 1, 2021. Email** your application form and scanned poster to lorelly@usf.edu.

By signing this application, I hereby accept the conditions above.

I have read, understood, and agreed to the conditions above.

Applicant/Artist: _____ **Date:** _____