Welcome to the final newsletter of the Fall 2020 semester.

**Message from the UG Advisor:** Online walk-in advising is available each week day. See the CSE website for time periods and other details. To meet with an advisor, send a message in Teams during the walk-in period. Undergrad Announcements can be found here. Add-drop week begins Monday, December 11th. If you are still looking for a course, this may be a good opportunity to find space. Fall grades are scheduled to post in OASIS on Friday, December 18th. FALL 2020 GRADUATES: check your email and respond to the mandatory CSE survey if you have not done so already. Students in the BS/MS Pathway Program (formerly the Accelerated Program) will need to submit the pathway progression paperwork the semester they plan to graduate with their bachelor's degree. Please contact the graduate program specialist (jlpruitt@usf.edu) when you are ready to get the paperwork started. It MUST be submitted before the end of the semester you plan to graduate, or you will not progress to the MS program.

**Message from the Grad Program Assistant:**
Happy holidays! The office will be closed from 12/24 - 1/3. I will work to answer any emails received over the break when the office reopens on 1/4. **If you have any pressing issues, please email me before the break, so we can get them resolved.** The last day to register for courses without a late fee is January 8. This means you must be registered for something by 1/8. You can still make changes (add/drop classes) during add/drop week from 1/11 - 1/15. **Your schedule should be final by the end of add/drop week.** If you have holds on your account, you cannot register until the holds are removed. The SI and IM holds are removed by Student Health Services. Please see this website for details. If you need a permit for a class, you need to submit the COMPLETED plan of work for approval first. If approved, I can issue permits for classes in our department. For classes in other departments, you will need to contact that department to get a permit. If you need to register for thesis, independent study, or directed research, you must submit a signed grad contract to me, and I will register you for the course. Students planning to graduate in Spring 2021 should check your OASIS account now to make sure you do not need to submit a course transfer, change of major, or any other forms that may hold up your graduation if you wait until spring to submit them. If you plan to graduate in Spring 2021, you must be registered for at least 2 credit hours.

Attached are announcements for the following (please note that this listing does not imply University or Department endorsement):
- Join us to help shape the future of CSE – Be a CSE Ambassador
- Princeton Ph.D. Opportunities
- Department of Defense Cybersecurity Scholarship Program
- USF App Development Positions Available
- IBM Undergraduate Research Opportunity
- U.S. Department of Homeland Security Summer Internship Opportunities
- Tampa Bay Lightning Hockey Operations Programming Internship
- Institute of Applied Engineering Web Developer Job Opportunity
- Embarc Collective Data and Analytics Associate Job Opportunity
- Chameleon Software Developer Job Opportunity
- JP Morgan Software Engineering Job Opportunity
- doxy.me Part-time Internship Opportunity

Regards,

Ken Christensen
Professor and Associate Chair of UG Affairs
Join us to help shape the future of CSE – Be a CSE Ambassador

Computer Science and Engineering is building a small group of selected students to serve as student ambassadors. As a student ambassador you will represent CSE to prospective and current students. A key mission for ambassadors is to help create and promote an inclusive environment to encourage students from populations underrepresented in computing and students without previous computing experience to be welcome and successful.

We envision that ambassadors will be involved in activities including:
- Communicating directly with prospective students including telephone contact
- Creating informational material for prospective students
- Hosting events for students admitted but not yet committed to USF or to CSE
- Serve as the point of contact for high school students interested in USF CSE
- Participating in Orientation events for new students
- Presenting at the Foundations of Engineering “monster talk” every semester
- Creating a strong social media presence for CSE
- Serving as a role model to both prospective and current CSE students
- Developing and leading peer support groups for new CSE students
- Participating in tutoring and peer learning for first and second year CSE students
- Other activities to be created by the ambassadors

Ambassadors will have the opportunity to meet with the CSE chair and other leadership on a regular basis to share their insights towards a goal of more inclusive educational experience for future and current CSE students. As an ambassador you will be highlighted on the CSE webpage. Join us to help shape the future of CSE!

If you are interested, please email your resume by Wednesday, December 16th. Ambassadors will be selected by about mid-January (and hopefully earlier). The current plan is that ambassadors will have an expected workload of 5 hours per week at a stipend of $20 per hour. All ambassador activities will be online through, at least, the end of spring 2021 semester. We are looking for a diverse group of students who are personable, positive, and with good academic standing. Student group leaders are highly encouraged to apply.

Please send your resume and a short (one paragraph, or so) explanation of why you want to be an ambassador to Dr. Christensen. If you have any question, please do not hesitate to ask.

Dr. Ken Christensen
christen@cse.usf.edu
Are you interested in a Ph.D. at Princeton in the following areas?

- Statistics and Machine Learning
- Operations Research & Optimization
- Financial Mathematics & Engineering
- Probability & Stochastic Analysis

Apply by December 31, 2020

Small Class Size
Excellent Placements in Top Academic or Industry Positions
Rigorous Core Program in Statistics, Probability, & Optimization

Visit us at orfe.princeton.edu/graduate
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://bit.ly/3qBBHtW

For questions, please email Dr. James Andrews (jimandrews@usf.edu) with “DoD CySP Query” in the subject line.

The deadline to submit a completed application packet is Noon on February 1, 2021.
APP DEVELOPMENT POSITIONS AVAILABLE!

Looking for front end and back end app developers!

We are looking for students to build a mobile app. The structure of the app will be very similar to a social media platform like Instagram, but its function will be different. The work will be completed remotely so students must be able to use zoom for meetings and have flexibility for meeting times. There will be multiple students (possibly from different universities) working on this. The students will be paid $1,000 each and will receive the payment in increments as they complete checkpoints throughout the development of the app.

For more information please contact:

Jordan Brown
brownj1@ufl.edu

(Students with experience and coursework in app development are preferred)
Applications Open: Quantum Undergraduate Research at IBM and Princeton

Deadline: Fri, Jan 15, 2021

Quantum Undergraduate Research at IBM and Princeton combines academic research in quantum science and engineering at Princeton with industry experience at IBM Quantum in Yorktown Heights.

This unique 12 week program consists of six weeks of academic research at Princeton working at any quantum-related group followed by six weeks at IBM working in the quantum computing group at Yorktown Heights. Housing and a stipend are offered at both sites. The whole program will be complemented by a summer seminar series with talks across a large range of topics in quantum information and different quantum platforms. This is a great opportunity for undergraduate students to both perform cutting edge quantum research and get industry experience in a single summer.

Over the course of 2020, Princeton University has learned a lot about how to make their interns feel better connected with one another and with colleagues across IBM Research, and plan to apply these lessons to the 2021 program. IBM and Princeton University are planning primarily for an in-person QURIP program in 2021, but are prepared to transition to a remote program if necessary.

The application deadline is Friday, Jan. 15, 2021. Administrative inquiries should be sent to Sandra Lam, sclam@princeton.edu. This program is sponsored by IBM and the Princeton Quantum Initiative.

Requirements to apply include:
1. Recommendation letter
2. Resume
3. Transcript

Apply Here
SUMMER INTERNSHIPS

Desiring hands-on experience?

Looking for access to unique facilities?
Want to network with professionals in the U.S. Department of Homeland Security?

Ready to enhance your academic and professional preparation to pursue a career in the federal government?

APPLY NOW!

Stipend: Undergraduates $900/week, Master's Candidates $1,100/week, Doctoral Candidates $1,200/week

For more information and to apply, visit:
TAMPA BAY LIGHTNING - Hockey Operations Programming Internship

Are you interested in working for a professional sports team? Are you looking for a way to get experience working without having to have prior experience? Are you interested in seeing more of the practical side of how your classes can be used in the real world? Do you have a desire to create your own solutions for problems rather than being told how you must do it?

Come be a part of the Tampa Bay Lightning’s Hockey Analytics team! Work with the department in constructing solutions to management and coaching questions about players. Help be a part of the whole design process from creating the idea to delivering the results. See your solutions help the team on the ice! Be one of the first to see and work with the new player tracking spatiotemporal data. You will be working closely with the Director of Hockey Analytics and the Data Science Programmer. This is a unique opportunity to have the flexibility to leverage your creativity to build new solutions. A part of this internship is to build systems from the ground up and to be able to take ownership in projects. This is a great way to expand your learning and to have the chance to learn more about new areas.

Requirements:
  • Strong OOP language skills
  • Conceptual understanding of front-end and back-end frameworks
  • Passion for growth and learning
  • Eye for detail and critical thinking

The intern will be responsible for the following:
  • Maintaining, executing, expanding our existing code base
  • Contribute to projects at all stages of the development cycle
  • Collaborate on multiple-person projects through VCS such as git
  • Creative problem solving

Preferred but not required:
  • Experience outside of school – professional work or independent projects
  • Machine learning experience, research, or interest
  • Familiarity with web scraping methods and tools

The internship will be unpaid, must be for school credit, and will run approximately 1/4/21 – 5/7/21. The time commitment is approximately 20 hours per week. Work may start at Amalie Arena and may transition to remote. Computer/software will be provided when at Amalie. Ability to attend select home games may be offered.

To apply, please send resume and cover letter to:
Mike Peterson, Director of Hockey Analytics, Tampa Bay Lightning  mpeterson@tampabaylightning.com
This will be an opportunity to develop a B2B website connecting Special Operations Command, USF, & other Academic Institutions across the US. We are seeking to build a communications forum to further research opportunities and continue to provide the Special Forces cutting edge technologies fostered through Academic Research.

We are currently seeking a talented Full Stack Web Developer to design and code this site and others.

View job posting: https://bit.ly/2KUqP9T
Full-time Web Developer
University of South Florida
Tampa, FL

Please Contact:
Scott Dalziel
Program Director - Academic Consortium
Institute of Applied Engineering
University of South Florida
Phone: 813-396-9709
dalziels@usf.edu
Embarc Collective
Data & Analytics Associate

About Embarc Collective:
Embarc Collective is a 501c3 nonprofit that helps Tampa Bay's startup talent build bold, scalable, thriving companies and currently supports over 50 early-stage technology startups. The support from Embarc Collective is hands-on and driven by the specific goals and needs of each startup being supported. Embarc Collective opened its 32,000 square-foot innovation hub at the start of 2020 in downtown Tampa at 802 E. Whiting Street Tampa, FL 33602.

About the Role:
The Data & Analytics Associate will report to the Embarc Collective CEO and be charged with continuing to build Embarc Collective’s capabilities as a data-first organization. This person will manage the collection, aggregation and maintenance of all data inputs generated from Embarc Collective programs and work on specific special research reports and projects for the organization and its stakeholders. As an organization focused on talent development, we operate with the assumption that the role will grow along with the person. Startup members of Embarc Collective will also leverage this person for thought partnership and guidance as they pursue their own data and analytics goals. Additional responsibilities may be assigned.

The right candidate for this position is someone who:
- Believes that with the right amount of effort, Florida can become a premier geography for entrepreneurs to build technology startups
- Loves startups, new technologies and the broader innovation community
- Likes to play with tools including but not limited to Airtable, Google Analytics, HubSpot, Zapier
- Is familiar enough to be dangerous with JavaScript, Golang, React, Gatsby and Python
- Is curious and thrives when allowed to learn on the job
- Is self-directed but also extremely collaborative, both within the organization and externally when engaging with partners
- Is a natural problem solver, but knows when to ask for help and how to manage up
- Is a great communicator, especially in writing
- Is excited to use technology to solve business problems and challenges
- Demonstrates professionalism, a customer-focused orientation and polish in one’s work

Apply by emailing your resume to Lakshmi Shenoy, CEO of Embarc Collective (lakshmi@embarccollective.com).

Embarc Collective does not discriminate on the basis of race, sex, color, religion, age, national origin, marital status, disability, veteran status, genetic information, sexual orientation, gender identity or any other reason prohibited by law in provision of employment opportunities and benefits.
Chameleon Software Developer Job Opportunities

We have a new job opening! Whether just starting out or further along in your career, Chameleon has a job opportunity for you.

We currently have two open positions at the University of Chicago:

**Entry Level Software Developer**

**Description:** You will work on the intersection of development, research, and operations, discovering new requirements through working with scientific users, designing and building solutions that change the way science is done, deploying and operating them, and then supporting and interacting with their users to build communities around them.

**Senior Software Developer**

**Description:** You will work on the intersection of development and research: discovering new capabilities through working with scientific users—and then bringing those capabilities to production to change the way science is done.

You’ll develop the latest cloud technology while interacting with users and seeing the difference your role makes on a daily basis. As Chameleon enters Phase 3, join the team to work on the newest features and technologies.

We would love to hear from you!
Full-time Job at JP Morgan
Software Engineering positions in Cloud and Big Data

Job Description

Cloud Big data platform is a team responsible for architecting, designing and implementing a new, cutting edge, cloud platform for transforming our business applications into scalable, elastic systems that can be instantiated on demand, on cloud.

The role calls for the Engineer to design, develop, configure, test, debug and document all layers of the Cloud stack to satisfy the new big data system requirements. This is expected to range from Cloud hosting platform to the design and implementation of higher level services such as the IaaS, PaaS and SaaS layers, big data platform and services. The focus of this role is on the product and service for cloud big data platform.

The ideal candidate should be comfortable being directly involved with the design, development, testing, and operation of the solutions that will be composed into the Cloud Services environment. Once implemented, the candidate will typically be expected to provide some higher level production and technical support in the case of a serious outage. They will also provide comprehensive consultation to business unit and IT management and staff at the highest technical level. They will work closely with Cloud Services management to identify and specify complex business requirements and processes that drive the platform roadmap. Additionally, they will research and evaluate alternative solutions and make recommendations for changes that would enhance the platform.

Responsibilities shall include:
- Work as part of the team to ensure appropriate business measures are defined and documented
- Create cloud and big data technical design recommendations for developing and integrating new software and system technologies – from the physical layer through to the virtual layer – per written specifications; test, evaluate, engineer, implement and support said technologies
- Evaluate service level issues and suggested enhancements escalated by support to diagnose and address underlying system problems and inefficiencies - engage third party suppliers on support issues as required
- Review and influence new and evolving design, architecture, standard, and methods for operating services and systems
- Respond to and resolve emergent service problems; build tools and automation to prevent problem recurrence
- Participate in software and system performance analysis and tuning, service capacity planning and demand forecasting
- Drive technical innovation and efficiency in infrastructure operations via automation – for example automated server build processes
- Create processes that enhance operational workflow and provide positive customer impact
- Design systems management solutions using automation and self-repair rather than relying on alarming and human intervention
- Avoid re-inventing the wheel and prefer appropriately simple, repeatable solutions over more complex and failure prone ones
- Develop tools and utilities to provide short term solutions to immediate needs as required

Preferred skill sets
- Excellent documentation and communication skills – needs to be able to clearly articulate complex IaaS / PaaS / SaaS concepts to people new to Cloud and Big Data Engineering
- Strong analytical and troubleshooting skills - desire to solve complex problems at scale
- Software engineering, system administration, systems engineering, network engineering
- Strong Data Services expertise – Databases, Messaging, Caching, Big Data solutions
- Strong Programming skills – needs to be able to code, leverage APIs, and understand security, authentication and data structures.
- Highly proficient in at least one programming language such as python, perl, shell, java, c#
- Good knowledge of networking, security, DNS, Unix/Linux operations and troubleshooting, on AWS, Azure or GCP.
- Understanding of how commodity servers, operating systems and networks function, perform and scale
- Minimum 2 years software Engineering / Development experience

Contact (please include most updated resume):

azael del rosario.
azael.delrosario@jpmchase.com
Who we are:
We are a technology company that wants to make the world a better place through telemedicine, enabling health care providers to conduct secure video visits with their patients. Soon we will have a million users spanning the globe who then visit with tens of millions of patients. We have hubs in Charleston, Salt Lake City, Rochester, Kiev, and London. We're entrepreneurial, dedicated, and community-minded in spirit. We want to deliver the best possible telemedicine experience for our users and their patient population. https://twitter.com/doxymeHQ

Benefits:
Part time employment (≤ 20 hours/week) with ability to work remotely on a flexible schedule.

Who you are:
We are looking for a Computer Science Intern to join our research team in the Research/Innovation Department at Doxy.me. To be successful you will have experience in data structuring, modeling, and programming.

Your role:
You will contribute by developing dataset structures, modeling, and programming and will be responsible for architecting, designing and developing data solutions. You will work in the Department of Innovation and report to the Director of Research.

How you will contribute:
- Design conceptual and logical models for data warehouse and data marts
- Incorporate new development into existing data warehouse structure
- Design, implementation and delivery of a next-generation data architecture platform

Your required talents:
- Experience with data structuring, modeling, and programming
- Detail-oriented, organized, deadline-driven
- Excellent verbal and written communication skills

Minimum qualifications to respond to this posting:
Must be a graduate student in computer science OR an undergraduate student majoring in computer science with at least two years of study and courses in Data Structures, Analysis of Algorithms, and Software Engineering.

Interested students can email a brief cover letter describing their skills and experience, resume/CV, and unofficial transcripts to Janelle Barrera at janelle.barrera@doxy.me.