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WORK EXPERIENCE

AWS (12-week Internship) – Worldwide Storage Specialist Organization New York, NY

Associate Solutions Architect (SA) Intern

May 2022 - August 2022

- Spearheading Flexible Snapshot Proxy (FSP), an open-source project hosted in AWS Labs on GitHub to distribute Amazon EBS Snapshots using Zstandard compression for distribution and synchronization of block and file data efficiently at a global scale
- Improves global snapshot distribution and synchronization from a “best-effort” basis to a theoretical limit of 1 TB per 6 hours
- Researching how to create a CI/CD pipeline with GitHub actions to run unit tests and publish packages to Python Package Index
- Writing documentation on project architecture and code design to encourage adoption and development with industry partners

Amazon.com (12-week Internship) - Physical Retail Stores Division (Amazon Go) Seattle, WA

Software Development Engineer (SDE) Intern

May 2021 - August 2021

- Implemented a cost-efficient AWS serverless framework to meet these business and technical requirements:
- Architected to autonomously scale to 1,000 physical retail stores or 6.4 million Internet of Things (IoT) devices
- Retrieve & display network topology of store sensors IoT devices, dispatch user-initiated commands to specified IoT devices of store device network, and present dashboards with health metric information for monitoring IoT devices
- Accommodate extensible authentication of store managers to assist with optimal store IoT device placement and management
- Stack: AWS API Gateway, AWS CloudWatch, AWS, Cognito, AWS DynamoDB, AWS Lambda, AWS IoT, Node.js, React.js

EDUCATION

University of Virginia – School of Engineering and Applied Science, Charlottesville, VA

GPA: 3.7/4.0

B.S. Computer Science (3.8/4.0) and Economics (3.6/4.0) – dual major

Graduating May 2023

- Coursework: Data Structures, Algorithms, Operating Systems, Machine Learning, Cryptocurrencies, and Game Theory
- Authoring an undergraduate thesis about social and cultural impacts of blockchain and digital financial innovation
- Achieved Dean’s list 5 semesters and was awarded the Barbara B. Darden Scholarship for academic achievement and character

SKILLS

- Proficient in: Amazon Web Services, Git Version Control, Java, JavaScript, Python, Web APIs
- Experience with: Bootstrap, C, C++, Django, Docker, PostgreSQL, React.js, Shell Scripting, SQL, SQLite, x86 Assembly

PROJECTS

Exercise Gamification - School Project (Advanced Software Development CS 3240)

Spring 2021

- Collaborated with five students to design a web application to encourage exercise through competition with peers
- Formalized and documented project requirements to direct the project to success by synthesizing user stories from 50 students
- Implemented Model View Controller (MVC) design pattern to practice modular system architecture and development
- Technologies Used: Bootstrap, Django, OAuth 2.0, Python, PostgreSQL, Heroku, Travis CI/CD

Virginia COVID-19 Email List - Personal Project

Summer 2020

- Created email list and simple website for user subscription to daily email updates on coronavirus statistics and graphics for a specific county or city selected by users in the state of Virginia with data sourced from the Virginia Department of Health APIs
- Capable of tracking 133 cities & counties; at its peak had 60 users
- Development stack: Bash Scripting, CRON, Python, AWS Lightsail, Flask and SQLite

EXTRACURRICULAR ACTIVITIES

Computer Science Teaching Assistant, Charlottesville, VA

Advanced Software Development Teaching Assistant

August 2022 - Present

- Mentor and advise 3 teams of 5 students on planning and development of a semester-long interactive web application project
- Conduct office hours to help student’s projects: planning, debugging, advising design patterns, and implementation strategies
- Grade and provide constructive criticism to students' submitted work on ethics, agile/scrum methodologies, software licensing, etc.

Applied Mathematics Teaching Assistant, Charlottesville, VA

Calculus 2 Teaching Assistant

August 2020 – December 2021

- Collaborate closely with a professor to improve education quality for 50 engineering students in the classroom and on Zoom calls
- Field and answer questions from students about problems sets in a 1:1 setting to remediate identified knowledge gaps

Beach Volleyball Club, Charlottesville, VA

Treasurer

August 2021 – May 2022

- Organize play sessions with other student members twice a week; plan and budget club social activities bimonthly