TAM PHAN

SUMMARY

Graduate MS student at Virginia Tech pursuing a full time software engineering position. I hope to learn and work with emerging technology interfaces like AR/VR or Brain Computer Interfaces, planning and developing modes of interaction, and seeing my results help build the next generation of tech devices.

EDUCATION

Virginia Polytechnic Institute and State University Aug. 2019 to May 2021 Expected Master of Science, Computer Science

Virginia Polytechnic Institute and State University Aug. 2016 to May 2020 Bachelor of Science, Computer Science

EMPLOYMENT

Amazon Web Services

Software Engineer Intern · June 2020 to Aug. 2020 · Herndon, VA

Built a service that can monitor maximum clock error bound on customer systems to help onboard cloud customers with time synchronization constraints

Planned and presented design document to demonstrate problem statement, constraints, solution and system design architecture

Wrote entire service from scratch, building modules and unit test modules in Rust

Wrote full customer documentation, plans for vending to customers, and manually tested launching several instances running different Linux distributions to run the binary

Chartio

Software Engineer Intern \cdot Jan. 2020 to May 2020, Aug. 2020 to Current \cdot Blacksburg, VA

Rebuilt authentication flow for application in Django to improve security and allow for safe implementation of on-login functionalities

Built new customer onboarding flow with React/Redux for an improved user interface and simpler, direct onboarding experience

Optimizing ORM queries that caused customer latency, once seeing staggering improvements over 1000%

Set up REST API endpoints in Django accessing PostgreSQL database to support features on client side

Solers, Inc.

Software Engineer Intern · May 2019 to Aug. 2019 · Chantilly, VA

Built REST and SOAP services with JAX-RS and JAX-WS to communicate through application layers to PostgreSQL database

Rebuilt new UI for legacy web service using React with Redux and Material UI component library

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Debugged JavaScript and REST and SOAP requests in IntelliJ & Chrome debug console

SKILLS

CODING/FRAMEWORKS: Python, JavaScript, Rust, Java, C, C#, Golang, React/Redux, Django/DRF, Spring Framework, SQL

ENVIRONMENTS AND TOOLS: Linux, Git, AWS, Unity, Eclipse, IntelliJ IDEA, Visual Studio Code, SoapUI, pgAdmin

RELEVANT COURSEWORK: Computer Systems, Data Structures and Algorithms, Virtual Environments, Intro to Human Computer Interaction

PROJECTS

IdeaSpace

May 2020 to Current

Building an AR space for collaborative brainstorming on virtual notes with other AR users

Prototyped with ARCore and developing on a Microsoft HoloLens AR headset

Capturing images via Camera API on HoloLens device to build virtual objects

Connecting Unity/C# client to Python Flask server using OpenCV to process images and translate to virtual objects

Immersive Document Analysis in VR

Jan. 2019 to May 2019

Developed an immersive VR environment for a user to view massive amounts of documents in with Unity/C#

Analyzed use cases and usability studies to improve on app features

Organized client meetings and performed contextual inquiry to narrow use

Carpool Creator Web Application

Jan. 2019 to Current

Personal project to help efficiently group people together for carpooling to destinations

Using Angular 7 for client side application and building an API using Golang

Working with Google Maps Directions Matrix API for querying locations and addresses

ACTIVITIES

Korean American Student Association Vice President, Events Coordinator Apr. 2018 to Apr. 2020

Organized events with an officer board for a large member base of students (100+) $\,$

Work to implement Korean culture into activities for students and promote around community

Manage officer meetings, compile weekly assignments for officer board members in Google Drive

Meet with club sponsors, advisors, and persons of interest for collaboration opportunities