Kiavash Samadi

COMPUTER SCIENCE MAJOR · YEAR 3

Tech Skills

Languages: Java, JavaScript, Python, C, C++ **Technologies**: Git, Bash, Spring Boot, Angular, Azure, Docker, Kubernetes, Jenkins

Work Experience _____

Department of National Defence

Ottawa, ON

BACKEND DEVELOPER

May 2020 - Aug. 2020

- Contributed to the development of Assemblyline, an open source scalable malware detection and analysis platform
- Implemented a Python service to analyze potentially malicious Excel documents containing obfuscated Excel 4.0 macros
- Decoded obfuscated macros and utilized an emulator to interpret the macros without having to execute malicious code
- · Generated detailed threat assessment reports based on the severity of the indicators of compromise identified

FULL STACK DEVELOPER Sept. 2019 - Apr. 2020

- Developed web applications using Spring Boot (Java) to implement the RESTful backends and Angular to create the TypeScript-based frontends
- Automated business processes by developing web apps which incorporated e-signatures, email notifications, relational databases, and multiple users with varying permissions
- Created a CI/CD pipeline to continuously build, test, and deploy applications with branch-specific modifications using Azure, Docker, Kubernetes, Jenkins, Terraform, and SonarQube
- Built an XML digital signature library and measurably improved performance by implementing performance logging
- Participated in the Agile planning process and acted as scrum master

Projects_

Visual Language Learning (nwHacks)

ANDROID APP

- A mobile app that, given an image of an object, generates a quiz with correct and incorrect translations to assist in the learning of a new language
- Created a user-friendly interface with a built-in history of captured images and their corresponding quizzes
- Utilized Java to create the client-side which interfaced with a RESTful API and Google App Engine
- Used Google Cloud Vision and Translation APIs in conjunction with Datamuse to retrieve translated words on the server-side

Image Compression

ALGORITHM

- A lossy image compression algorithm created using C++
- Used quadtrees to break images down to individual pixels and average out values to generate a new image
- Optimized splitting points by minimizing the average entropy over nearby pixels

Extracurricular Activities

UBC Computer Science Student Society

Vancouver, BC

Sept. 2018 - Apr. 2019

• Planned and coordinated events for the Computer Science student body

- · Attended weekly meetings to provide feedback, discuss future plans, and improve operations within the club
- Developed the necessary skills to effectively communicate with club members and other executives

FIRST YEAR REPRESENTATIVE

Oct. 2017 - Apr. 2018

- Led a committee of students pursuing degrees in Computer Science
- Organized events to raise interest in Computer Science and improve engagement with incoming freshmen

Education_

SOCIAL OFFICER

University of British Columbia

Vancouver, BC

BACHELOR OF SCIENCE - MAJOR IN COMPUTER SCIENCE

Anticipated graduation date of May 2022

Sept. 2017 - Present