Brian Fong
Software Engineer

Advocate for technology to help better, improve, and protect people's lives

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WORK EXPERIENCE

Software Engineer – Azure Core Security Services
Microsoft

03/2020 – Present   *Redmond, WA, USA*

Achievements/Tasks

- Wrote maintainable and secure C++ code for authentication used in an SGX enclave for attestation of Trusted VMs
- Pioneered the enclave validation workflow system to automate git, run build tools, clear and deploy enclave images and run tests
- Built the testing framework for the Trusted VMs by automating and implementing end-to-end tests with PowerShell runbooks

Software Engineer Intern - Azure Red Team
Microsoft

05/2019 – 08/2019   *Redmond, WA, USA*

Achievements/Tasks

- Mentored a team of interns by organizing workshops to help onboard them to the tech stacks used as well as providing guidance
- Developed a mixed-reality Unity cross-platform application for viewing Azure Active Directory graphs in 3D
- Integrated a chat-bot in Azure to allow voice commands for accessibility

Software Engineer (Contract) - Garage
Microsoft

09/2018 – 12/2018   *Vancouver, BC, CAN*

Achievements/Tasks

- Maintained a mixed reality C#/Unity application used for visualizing tumors and cancer cells
- Worked with the MRTK and PUN to create a P2P app that renders holograms in 3D with the HoloLens and can be manipulated remotely
- Documented libraries used as well as kept them up to date before hand off to customer for ease of use

Software Engineer Intern - Big Park
Microsoft

05/2018 – 08/2018   *Vancouver, BC, CAN*

Achievements/Tasks

- Made performance tests cross platform for Canvas 3D, a 3D engine powering more than 20+ millions instances of active apps
- Improved data reporting system to handle more data while allowing users to consume data in an efficient manner
- Used C++, C#, CMake, Power BI, Powershell Scripts, Azure Cosmos DB, and Azure Functions for developing on Windows, MacOS and iOS

EDUCATION

Bachelors of Science (Major in Computing Science)
Simon Fraser University

09/2014 – 06/2020   *Burnaby, BC, CAN*

SKILLS

C# · Python · C · C++ · Powershell · HTML/CSS/JavaScript · Matlab · R · Ruby · Bash · Unity · Azure · GCP · React JS · Express JS · Django · MongoDB · CosmosDB · Git · Postman · Wireshark · PowerBI · Jarvis

PERSONAL PROJECTS

RemotechWork.com (05/2020 – Present)

- Used React JS, Express JS, and Mongo DB to create a web app that lists remote jobs in response to the COVID-19 pandemic to aid those in need for work
- Did full-stack web development with Express JS to apply CRUD operations to Mongo DB in the backend and React JS to call the Express API to receive data for the frontend
- Hosted the web app on an Azure Linux VM using NGINX as a reverse proxy server for the React and Express app and bound the IP address to a domain name

R.P.R.P.G. (Reproducible Pseudo Random Password Generator) (05/2019)

- Used Javascript to create a password generator on the client side to create a secure way to generate passwords consistently by entering data in a HTML form and using JavaScript to hash a password
- Minimize the need to save data in a database and to reduce data transferred over the network to minimize possible attack vectors
- Increased complexity to passwords by not only relying on the seed generated by the answers to prompts, but also incorporating the answers into the password generation

INTERESTS

Guitar · Foosball · Game Dev · Fiction Writing · Martial Arts