Charles Johnston

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Experienced Software Developer with 5+ years in iOS development. Recently expanded skills with machine learning and deep learning certifications. Looking to re-enter the tech industry, bringing problem-solving abilities and a passion for building scalable, high-quality software.

Skills

OOP, Python, Swift, Objective-C, Git, Javascript, Machine Learning with Tensorflow/Keras, Docker, Go, SCRUM, LUA, SQL, HTML, CSS, JSON, WSL, RESTful, XML

Projects

<u>Chess AI</u> – Reinforcement learned model created with TensorFlow. Machine learning coded in Python. Front-end with html/css/js. Leveraged Google Colab to train the model.

Type - macOS Text Editor focused on markdown. Designed to support multiple languages, but will focus on markdown by allowing a web preview. Multi- threaded support on syntax highlighting and code grouping to allow uninterrupted keystroke input when working with large documents. Supports code folding and drag-and-drop of code groups.

<u>Space Attack</u> - iOS game built on SpriteKit framework. Dynamic Ad Insertion using Google Mobile Ads. Utilizes GameKit to provide achievements, saves to cloud. Optimized sound by creating queue to prevent bottle-necking of sound channels. Reduced CPU load and energy usage by providing customized, simplified physics geometry.

Experience

HVAC Technician | Aire Central

Sep 2020 – Jun 2024

Diagnosed and repaired residential and commercial HVAC systems, using problem-solving skills to address mechanical and electrical issues. Communicated clearly with customers regarding system operations and service options. Strengthened hands-on technical ability and system-level thinking; skills that continue to complement my software development approach.

iOS/tvOS Application Developer | Foothills Consulting Group

Aug 2015 – Jun 2018

In-depth video stream debugging. Investigation of segments using middle-man proxy (Charles Proxy). Worked closely with back-end team while developing next-gen application. Significant role in Mobile DVR support team, resolving P1 issues. Allowing customers to control their set-top-box both in-home and out-of-home. Leadership role while integrating Download-And-Go feature. Integral to Cloud DVR implementation. Enabling customers to have a set-top-box experience without hardware.

iOS Application Developer | Unbounded Solutions

Jun 2013 – Aug 2015

Took part in full Software Development Lifecycle of multiple applications from concept to production. Increased the scalability of the project by implementing Google Places API into the app. Incorporated a label printer with the iOS point-of-sale application; completed without the use of a 'middleman' AirPrint server. Refactored management executions of orders to be handled in the background without locking up the main thread and UI using GCD.

Education