Charles Johnston

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Versatile Software Developer with 5 years of experience building iOS apps, backend systems, and machine learning models. Seeking to rejoin the tech industry with fresh skills and a proven history of shipping production code in cross-functional teams.

Skills

Programming Languages: Python, Swift, Objective-C, JavaScript, C#, SQL, HTML, CSS, Go, PHP, C++ Mobile Development: Native iOS, MVC, MVVM, Push Notifications, Auto layout, Interface Builder Tools & Platforms: Git, Docker, Xcode, VS Code, PostgreSQL, Jira Software Development Practices: OOP, RESTful APIs, Agile, SCRUM, Design Patterns, JWT Machine Learning: Regression, Gradient Descent, Reinforcement Learning, TensorFlow/Keras

Projects

MTG Game Predictor Mar 2025 – Present

Full-stack web app with Go backend, PostgreSQL database, and Docker-based E2E testing via Cypress. Includes multiple ML models (boosted decision trees, neural networks). Frontend built in React, deployed separately. Implemented JWT authentication system.

Bonk Nov 2024 – Jan 2025

Designed and developed a rhythm-based idler game in Unity using C#. Simulates pendulum motion and generates polyrhythmic audio in real time. Integrated Steamworks SDK to publish the game on Steam.

AI Chess Engine Sep 2024 – Nov 2024

Built a reinforcement-learned chess engine using TensorFlow and Python. Trained in Google Colab. Frontend UI built with HTML/CSS/JavaScript to allow gameplay against the model.

Experience

HVAC Technician | Aire Central

Sep 2020 – Jul 2024

Diagnosed, repaired, and installed residential and commercial HVAC systems. Managed complex on-site issues and ensured customer satisfaction across high-stakes projects.

iOS/tvOS Application Developer | Foothills Consulting Group

Aug 2015 – Jun 2018

Led efforts on mobile DVR and streaming apps. Collaborated with backend engineers to deliver next-gen features, including Cloud DVR and Download-and-Go. Key player in debugging video playback and network proxy tools (e.g., Charles Proxy).

iOS Application Developer | Unbounded Solutions

Jun 2013 – Aug 2015

Delivered multiple apps from concept to App Store release. Integrated Google Places API and Bluetooth printing. Optimized UI responsiveness with GCD to avoid main thread blocking.

Education

Deep Learning Specialization - Coursera	Jan 2025 – Apr 2025
Machine Learning Specialization - Coursera	Jul 2024 – Oct 2024
Boot.dev – Python, OOP, Linux, Go, Git, Functional Programming	Feb 2024 – Sep 2024
Associates Degree in Game Development - Gwinnett Technical College	Aug 2010 – May 2012