Marcus Bolton

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EDUCATION

University of Washington Sep. 2020 – Dec. 2023
Bachelor of Science in Computer Science *Seattle, WA*
- GPA: 3.98/4.00
- Coursework:

Distributed Systems Advanced Databases Data Structures Operating Systems Software Design

Systems Programming Artificial Intelligence Compilers Linear Algebra Multivariable Calculus

EXPERIENCE

Software Engineer Intern Jun. 2023 – Sep. 2023
F5, Inc. *Seattle, WA*
- Worked with the Distributed Cloud team to develop a suggest API using Go and AWS to simplify the cloud configuration experience for clients
- Implemented Prometheus metrics for AWS and Azure drivers, providing real-time data and graphs on resource allocation and consumption
- Designed and wrote unit tests to bolster pipeline checks, achieving up to 90% test coverage

Coding Curriculum Developer Dec. 2022 – Jun. 2023
Lavner Education *Seattle, WA*
- Developed programming projects and associated tutorials taught to 1,000+ students annually
- Built curricula for courses in Java, C++, Python, and web development
- Overhauled curricula and programming projects from previous years, adding support for new language standards and features

PROJECTS

Resume X-Ray | *Node.js, React, OpenAI/ChatGPT, AWS (API Gateway, Lambda, Cognito)* Apr. 2023 – Present
- Built a web application capable of parsing user resumes and generating an interactive report which offers targeted improvement suggestions for each section
- Designed algorithms and associated APIs to parse resumes into their different sections and components
- Utilized AI technology and collected data to provide insight into 10+ categories of the user's resume content
- Implemented a scalable frontend with React, including an interactive report on the user's resume data

Snake AI | *Java, AWT* Jun. 2022 – Sep. 2022
- Built an AI-capable rendition of the classic game "Snake" utilizing Java and AWT
- Integrated AI strategies including reactive behavior, pathfinding, and simple neural networks to support multiplayer functionality
- Designed a flexible API which allowed smooth interaction between AI implementations and the game environment

FaceMatch | *Swift, SwiftUI, AWS (Lambda, Rekognition, DynamoDB, S3)* Jun. 2021 – Feb. 2022
- Developed an application which enabled users to find which celebrity (or person from gallery) they most resemble
- Architected a robust backend infrastructure using AWS, which reduced latency and lowered operational expenses
- Released to the iOS App Store and downloaded 10k+ times in the 7 months it was available

TECHNICAL SKILLS

Programming Languages:
- **Proficient**: Java, C, C++, Python, JavaScript, Go, SQL, HTML/CSS, Swift, SwiftUI
- **Familiar**: OCaml, Racket, Kotlin

Frameworks/Libraries: React, Node.js, Express, gRPC, JUnit, Spring

Developer Tools & Other Technologies: Git, Docker, Kubernetes, Prometheus, ChatGPT, Linux, Amazon Web Services (AWS), Azure, Google Cloud Platform (GCP), Protobuf, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, Xcode