

# Josef Bertolini

linkedin.com/in/josef-bertolini • josefbertolini@hey.com  
josefbertolini.github.io • 760.423.8168

## SKILLS

### Language and Tool Proficiencies

- OOP Languages, Query Languages, C/C++, and Go
- \*NIX command line, Scripting, Azure Cloud
- Microservices, Databases, Low Level Programming

### Interpersonal

- Sociable & Adaptable • Quick & Eager Learner
- Honest & Direct • Independent Worker
- Clear Communicator • Supportive Team Member

## PROFESSIONAL EXPERIENCE

### Docusign

August 2024 - Present

#### *Software Engineer* - C#

- Worked on the Search Team to design & **implement a REST API** for efficient storage & retrieval of customer data
- Designed and implemented a system for ordering search results per a defined schema, featured in a demo by the CEO
- Engaged in design discussions and decision-making processes to **shape the future direction of the product**
- Worked closely with team members to **enhance task efficiency**, supporting both coding and non-coding efforts
- Supported the triage and resolution of live-site issues using observability tools like Grafana and Kusto
- Enhanced and updated the onboarding process and documentation with up-to-date information

### Microsoft

May 2022 - April 2024

#### *Software Development Engineer* - C++, PowerShell

- Maintained a **critical** internal Azure VM Extension running on **2.5+ million machines**
- **Led development** of adding support for 2 new platforms, more configuration options, & automatic migration
- **Created the extension's testing infrastructure**, which included monitors, alerts, & dashboards
- Crushed bugs & implemented new features, which simplified onboarding, improved reliability, & eased troubleshooting
- Worked closely with customers to triage and provide quick mitigations for bugs and logic errors
- Wrote documentation for usage and configuration, and TSG's for debugging the extension
- Refactored & **modernized** the legacy code base, making development **less error-prone**

### Ezoic, Inc.

June 2021 - April 2022

#### *Software Engineer* - Go, JavaScript, PHP

- **Solely maintained** core repositories & databases for *LEAP Technologies* within 4 weeks of starting
- **Improved performance & reliability** of *LEAP's* crons, APIs, tools, & customer-facing web apps by up to **5x**
- Collaborated with other teams to integrate the APIs across multiple products, adding value throughout the company
- Implemented feedback from customers & coworkers to increase usability for the product's stakeholders
- Conducted code reviews & debugging sessions with coworkers to ensure software remained high quality
- Onboarded & mentored new hires, getting them familiar with company culture & code-bases within 3 weeks

### University of California, Irvine

March 2021 - June 2021

#### *Teaching Staff, Grader* - C, Python

- **Designed** 5 assignments covering topics from C & Systems Programming, such as shells & memory allocators
- Assisted students in **debugging code** & responded to student questions on the class forum
- Authored the Student Networking Project as a paralleled auctioning server with a **custom networking protocol**
- Implemented a C client & the scaffolding code for said project & scripts to simulate multiple users when grading

## PROJECTS

### Manga Packager - Go, JavaScript

- Simple server that scrapes websites & packages manga pages into a format readable on an iPhone or iPad
- Created a **mobile-friendly web-page** to proxy searching for manga titles & directly download to the device
- Designed the server to use RAM-only procedures to avoid issues with storing copyrighted material to disc

### Raging Rocks - Unity, C#

- Senior Capstone Project, an Angry Birds clone playable in a web browser
- Served as **the Primary Gameplay & UI programmer**, implementing most gameplay mechanics & menus
- Blueprinted & implemented the power up system, making prototyping & tweaking a frictionless process

### Chatroom Server - C

- Developed the server-side of a direct messaging & chatroom application similar to IRC
- Used **POSIX** threads to make a performant server that supports an arbitrary number of concurrent users & rooms
- Implemented **thread-safe generic HashMap, HashSet, & ArrayList** data structures from scratch

### FabFlix - Java, JavaScript, React, SQL

- Leveraged Modern React to build a Single-Page Application featuring **secure and functional authentication**
- Built the backend using a **microservice architecture**, abstracted by an API Gateway for improved scalability
- Developed a custom query builder over the Java ORM to enhance SQL query generation with resilience and efficiency
- Integrated the PayPal API to enable seamless and secure payment processing

## EDUCATION

### University of California, Irvine

B.S. in Computer Science & Computer Game Science, *Cum Laude*