Judah Landzberg

Software Engineer

PROFILE

I'm a full-stack software engineer with a passion for understanding and solving problems. Most recently, I created Pennant, an open-source computational notebook with real-time collaboration and shared code execution. I've built with JavaScript and Go ecosystems. I also teach Python and problem-solving skills in Baltimore City.

PROFESSIONAL EXPERIENCE

Creator, Software Engineer

2023

Pennant &

- Created Pennant ∂, an open-source computational notebook with real-time collaboration and shared code execution for up to 5 users per notebook
- Configured the service on AWS EC2, utilized AWS ECS for container orchestration and AWS S3 for persistent storage
- Dockerized code engine instances for resource control, implemented container networking with Redis and RabbitMQ, and customized Docker for collaboration
- Devised original low-level streaming and in-memory optimizations for speed, and queue orchestration to allow collaboration in our uniquely designed code execution engine
- Sandboxed containers to ensure safe execution of client-submitted code
- Leveraged CRDT frameworks in websocket collaboration service to handle state synchronization and automatic conflict-resolution for real-time collaboration
- Designed and implemented React UI which translates user interactions into CRDT data for use by the backend collaboration micro-service

Software Engineer 2021 – 2023

Self-employed

A few of the projects created & technologies used:

- RequestBin.site a real-time application for receiving & debugging webhooks (Socket.io, Nginx, Redis, DigitalOcean Droplet, PM2)
- Shopping Cart a database-backed e-commerce app (MongoDB, Express, React, Redux, Node)
- Phone directory: A phone directory for personal use (PostgreSQL, Express, vanilla JavaScript frontend, Node)

Computer Science and Math teacher

2013 – present

Mergenthaler High School, Baltimore City Public Schools

- Mergenthaler Excelerator Academy Teacher-of-the-Year
- Hosted a mentoring program pairing students with Software Engineer professionals

TECHNICAL SKILLS

Tooling

Docker, AWS Services (EC2, Lambda, S3, ECS), Linux, Bash, Redis, RabbitMQ, Heroku, DigitalOcean

Front end

JavaScript, React/Redux, HTML/CSS, YJS CRDT Framework

EDUCATION

B.A. Economics

Boston College

M.A. Chinese Literature

University of Hawai'i at Manoa

Back end

Node.js, Express, Go, Python, PostgreSQL, MongoDB, RESTful APIs