

Judah Landzberg

Senior Software Engineer

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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 Excelsior 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

Back end

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

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