

Matthew Lui

Software Engineer

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PROFILE

I am a full-stack software engineer based in Irvine, California. After working for over a decade in investment management, I decided to fully pursue my passion for solving complex problems through programming. Most recently I co-created Snowclone, an open-source backend-as-a-service supporting real-time applications. In my free time, I love making music, reading inspiring books, and taking mindful walks in nature.

PROFESSIONAL EXPERIENCE

Software Engineer and Co-Creator, Jan 2024 – present

Snowclone (snowclone-base.github.io) 🔗

Snowclone is an open-source backend-as-a-service that streamlines the process of provisioning and managing cloud infrastructure for the deployment of realtime-enabled web applications.

- Developed an orchestration service that launches a database, user interface, REST API, and a real-time notifications server with a single command (Node.js, Express, PostgreSQL, PostgREST, Server-Sent Events, Docker)
- Engineered a containerized backend infrastructure for cloud deployment (AWS: ECS, Fargate, RDS, Route 53)
- Architected a deployment pipeline to abstract away the configuration and provisioning of 50+ resources, deploying Snowclone's stack of services to AWS within minutes (Terraform)
- Built a CLI to facilitate the deployment and removal of backends, condensing dozens of configuration steps into six simple commands (AWS: S3, DynamoDB; Node.js)
- Authored an in-depth technical case study, readable at snowclone-base.github.io/casestudy/introduction/ 🔗

Software Engineer, Self-Employed 2022 – 2024

Developed freelance and open-source applications including:

- *Rekwestbin* - Tool for collecting and inspecting webhooks (Digital Ocean Droplet, Nginx, PostgreSQL, MongoDB, Express, Embedded JavaScript Templates)
- *Prayer Partner* - App for recording and tracking prayer requests (JavaScript, Express, MongoDB)

Vice President, Investment Research, Canterbury Consulting 2018 – 2022

- Chaired the global equity, hedge funds, and blockchain research committees, overseeing \$10B+ in public equity and alternative investments for individuals, endowments, and foundations
- Managed over 70 relationships with investment firms and reduced annual fees for clients by over \$1,400,000

SKILLS

Backend

Node.js, Express, Golang,
PostgreSQL, MongoDB,
REST APIs

Frontend

JavaScript, TypeScript,
React, Handlebars,
HTML/CSS, Tailwind CSS,
Jest

Cloud

DigitalOcean, AWS (ECS,
Fargate, RDS, Route53, S3,
DynamoDB) Terraform,
Render

Other

Git/Github, Docker, HTTP,
WebSockets, Object-
Oriented Programming,
Nginx, Postman, Server-
Sent Events

EDUCATION

University of California, Berkeley, Bachelor of Arts, Economics

2004 – 2007 | Berkeley, CA