

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.


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 secure 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 and deploy 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 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 | Newport Beach, CA

- Chaired the global equity research team, overseeing \$10B+ in public equity and alternative investments for individuals, endowments, and foundations
- Managed over 70 relationships with investment firms and negotiated client fee savings totaling \$1,400,000

SKILLS

| Backend | Frontend | Cloud | Other |
|--|---|---|---|
| Node.js, Express, Golang, PostgreSQL, MongoDB, REST APIs | JavaScript, TypeScript, React, Handlebars, HTML/CSS, Jest | DigitalOcean, AWS (ECS, Fargate, RDS, Route53, S3, DynamoDB) Terraform, Render | Git/Github, Docker, HTTP, WebSockets, Object- Oriented Programming, Nginx, Postman, Server- Sent Events |

EDUCATION

Launch School, Software Engineering and Full-Stack Development

2022 – 2024

Multi-year, mastery-based software engineering curriculum

University of California, Berkeley, Bachelor of Arts, Economics

2004 – 2007 | Berkeley, CA