

# Tim Williams

## Software Developer

✉ timw-dev@pm.me    📍 Vancouver, Canada    🔗 timw-csi.github.io

I am a full-stack software developer with extensive experience in the JavaScript ecosystem. I recently co-created Snowclone, a secure open-source backend-as-a-service with real-time functionality.

## PROFESSIONAL EXPERIENCE

### Co-Creator/Software Developer, *Snowclone* 🔗

2024 – present | Remote

Snowclone is a secure open-source backend-as-a-service (BaaS) with real-time functionality that streamlines provisioning infrastructure to the AWS cloud.

- Implemented a containerized multi-server backend architecture, incorporating APIs for schema migration, REST, and real-time notifications, all powered by a PostgreSQL database (Node.js, Express, and Docker)
- Engineered a real-time server to monitor database changes and broadcast updates to clients using Server-Sent Events (Node.js, PostgreSQL, SSE)
- Deployed containerized backend architecture into Elastic Container Service (ECS) Fargate, with Application Load Balancer coordinating client API requests (RDS, Dyanmo DB, S3)
- Enhanced data security by utilizing AWS security groups and private subnets, enabling secure backend multi-tenancy within protected network segments
- Built a CLI npm package to automate provisioning and teardown of AWS cloud infrastructure, accounting for 55 resources per backend (Terraform)
- Secured communication between CLI and backends via API keys and JSON Web Tokens
- Collaborated remotely with a team of four developers using agile workflow. (Slack, Github)
- Authored comprehensive technical case study detailing the problem domain, system design, and engineering decisions. <https://snowclone-base.github.io/casestudy/introduction/> 🔗

### Software Developer, *Self-employed*

2021 – 2023 | Remote

Developed open-source web applications, including:

- *Rekwestbin* - tool for collecting and debugging webhooks (DO Droplet, MongoDB, Nginx, EJS, Express)
- *Record Store* - inventory management tool (Node.js, Express, PostgreSQL, Pug)

### Desktop Analyst, *Silicon Labs*

2014 – 2017 | Austin, USA

- Supported mixed Windows/Linux/OSX environment of 500 users. Assisted DevOps team and network engineers
- Created bash scripts to reduce new-hire onboarding time

## SKILLS

### Languages & Frameworks

Node.js, Javascript, TypeScript, React, Express, Go, PostgreSQL, MongoDB, HTML, CSS, RESTful APIs, Jest

### AWS Cloud

ECS, EC2, Fargate, S3, DynamoDB, RDS, CloudWatch, IAM, Route 53, VPC networking, API Gateway, Lambda

### Other Technologies

Docker, Git/Github, Terraform, HTTP, Nginx, Postman, DigitalOcean Droplets, Bash, Linux

## EDUCATION

### Launch School

2021 – 2023

Multi-year, mastery-based software development curriculum. Read more at [launchschool.com/employers](https://launchschool.com/employers) 🔗

### Rice University, BA History

2008 – 2012