Tim Williams

Software Developer

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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	**AWS Cloud**	**Other Technologies**
Node.js, Javascript, TypeScript, React, Express, Go, PostgreSQL, MongoDB, HTML, CSS, RESTful APIs, Jest	ECS, EC2, Fargate, S3, DynamoDB, RDS, CloudWatch, IAM, Route 53, VPC networking, API Gateway, Lambda	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 🔗

Rice University, *BA History*   2008 – 2012