Tim Williams

Software Developer

✉ timw-dev@pm.me   📍 Seattle   🔗 timw-csi.github.io   in linkedin.com/in/tim-williams-6a5b6b2b2

SKILLS

Languages & Frameworks
Node.js, Javascript, TypeScript, React, Express, Go, PostgreSQL, MongoDB, HTML, CSS, Jest, React Testing Library

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

Other Technologies
Docker, Git/Github, Terraform, CI/CD, AI, LLM, HTTP, Networking, RESTful APIs, Storybook, Figma, Bash, Linux

PROFESSIONAL EXPERIENCE

Open Source Developer, *Mozilla*   07/2024 – Present | Remote
Enhanced code quality by refactoring, debugging, and testing in the Firefox codebase.
- Refactored browser's toolbar context menu from an object in a 7500+ line file into its own module, improving readability and scalability, and reducing complexity of future feature expansions
- Ensured integration of relocated functionality across the codebase, maintaining 100% functionality and preventing regressions in user-facing features
- Improved design consistency and maintainability by replacing hardcoded CSS with globally available tokens

Co-Creator/Software Developer, *Snowclone* 🔗   01/2024 – Present | Remote
Snowclone is a secure, open-source backend-as-a-service (BaaS) with real-time functionality that streamlines provisioning infrastructure to users' AWS accounts.
- Simplified local backend development with a single Docker compose file responsible for spinning up 5 services (APIs for REST, schema migration, real-time notifications, and documentation, all powered by a PostgreSQL database)
- Achieved real-time data synchronization between backend and frontend by monitoring database changes and broadcasting updates to clients using Server-Sent Events. Local instance load tested for 13,500 concurrent users
- Built a CLI tool to automate provisioning and teardown of AWS cloud infrastructure, accounting for 55 resources per backend (Terraform, Dynamo DB, S3)
- Deployed into Elastic Container Service (ECS), with API Gateway coordinating client API requests, ensuring scalability and high availability
- Configured AWS security groups and private subnets, enabling secure backend multi-tenancy (50 backends per VPC) and enhancing data security
- 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*   10/2021 – 11/2023 | Remote
Developed web applications, including:
- *Rekwestbin* - tool for collecting and debugging webhooks (Node.js, Express, MongoDB, Nginx)
- *Record Store* - inventory management tool (Node.js, Express, PostgreSQL, Pug)

EDUCATION

Launch School   2021 – 2023
Multi-year, mastery-based software development curriculum. Foundation built on principles of OOP, networking, databases, data structures, and algorithms, culminating in full-stack web application development.

Rice University, *BA History*
- 4.0 major GPA