Maddy Woodrum

New York, NY ✉ madzno12@gmail.com ✈ maddywoodrum.dev ⌂ madzno

I'm a Software Engineer with years of experience in full-stack development, in particular, JavaScript/Node.js and Ruby. Before my career in Software Engineering, I was a Registered Nurse and Nurse Practitioner, where I learned that I enjoyed thinking critically and solving problems. Most recently, I built Twine ⤢ , a drop-in auto-scaling WebSocket infrastructure for modern web applications that provides connection state recovery

🧠 SKILLS

Launguages
JavaScript (ES6+), TypeScript, Ruby, Go, SQL

Cloud
AWS, DigitalOcean droplet, Heroku

Libraries & Frameworks
Node.js, Express, React, Sinatra, Socket.io

Misc. Technologies
PostgreSQL, MongoDB, Docker, Redis, OOP, Git/GitHub, REST APIs, HTTP, WebSocket, Postman

💼 PROFESSIONAL EXPERIENCE

Co-Creator, Software Engineer, *Twine*   Aug 2023 – present | Remote

Twine is a drop-in auto-scaling WebSocket infrastructure for modern web applications that provides connection state recovery. Twine drops into an existing application via client and server libraries and is automatically deployed into a user's AWS account.

- Architected and constructed a drop-in auto-scaling WebSocket infrastructure using various AWS services (EC2, DynamoDB, Elasticache for Redis, Elastic Beanstalk).
- Built a Node.js backend REST API to facilitate communication with the Twine Server and persist received data in DynamoDB and Redis.
- Built a decoupled Redis pub/sub mechanism for sending data received from backend servers out to clients via a WebSocket connection.
- Implemented automatic connection state recovery mechanisms that provide in-order delivery of missed data and mitigate client disruption in the case of a dropped WebSocket connection.
- Wrote cron job logic to automate the removal of stale data from Redis.
- Containerized server code in a Docker container for deployment.
- Authored comprehensive technical case study, readable at https://twine-realtime.github.io/ ⤢
- Collaborated remotely with an international team of four engineers across three time zones using agile workflow.

Software Engineer, *Self-Employed*   2021 – 2023 | Remote

Developed freelance and open-source applications including projects like:
- **Request-Inspect** - Tool for collecting, inspecting, and debugging Webhooks (JavaScript, Node.js, Express, React, MongoDB, DO Droplet, Nginx).
- **Shopper-Cart** - a database-backed e-commerce app (JavaScript, Node.js, React, MongoDB).
- **Contacts-App** - Simple contacts manager (Ruby, Sinatra, PostgreSQL).

Nurse Practitioner, *Memorial Sloan Kettering Cancer Center*   Nov 2020 – Aug 2023 | New York, NY

Registered Nurse, *Memorial Sloan Kettering Cancer Center*   Sep 2015 – Nov 2020 | New York, NY

🎓 EDUCATION

Launch School, *Software Engineering, Capstone Program*   2021 – 2023

A multi-year mastery-based curriculum teaching full-stack engineering fundamentals from first principles. Read more at launchschool.com/employers ⤢

Hunter College, *Master's Degree, Nursing Science, Summa Cum Laude*   2018 – 2020 | New York, NY

Villanova University, *Bachelor of Science in Nursing, Cum Laude*   2011 – 2015 | Villanova, PA