Stephanie McCollom

Software Engineer

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I'm a full stack software engineer with extensive experience in both JavaScript and Ruby, and I'm also proficient in TypeScript and Go. I use my experience as a Production Manager to craft clean, efficient code and tackle complex problems.

PROFESSIONAL EXPERIENCE

Software Engineer, *Laridae* ⧉   2023 — present

Laridae ⧉ is an open-source tool offering zero-downtime, reversible database schema migration for PostgreSQL integrated into a deployment pipeline hosted on GitHub Actions.

- Engineered schema migration operations that harness multi-version concurrency control to avoid interfering with regular database reads and writes from the application during migrations.
- Leveraged PostgreSQL views, triggers, and connection control functions allowing multiple application versions expecting different schemas to use the same database simultaneously.
- Executed load testing on the application by conducting schema migrations on datasets of up to 10 million rows while simulating traffic to assess and optimize performance.
- Created a GitHub Action to integrate Laridae schema migration functionality with AWS infrastructure deployment and removal (ECR, AWS CLI, ECS Fargate, Docker, IAM roles, Terraform) into a CI/CD pipeline, reducing a 30-step workflow to one command.
- Architected class to propagate constraints between columns in PostgreSQL, strategically leveraging PostgreSQL's concurrency control to avoid application downtime during migrations.
- Authored a comprehensive case study ⧉ providing an in-depth analysis of Laridae's problem domain, system design, and engineering decisions.
- Collaborated remotely with a team of three engineers using daily standups and mob programming.

Software Engineer, *Self-employed*   2021 — 2023

Developed freelance and open-source applications including:

- HookHub - A tool for collecting, inspecting, and debugging HTTP and webhook requests in a human-friendly way (DO Droplet, Nginx, MongoDB, Node.js, Express, React).
- *eCart* - An e-commerce shopping cart (React, Express, Node.js, MongoDB).

Production Manager, *41 Entertainment*   2018 — 2021

- Oversaw the production of 3 animated children's television programs by managing client and vendor relations, overseeing budgets, schedules, and reporting.
- Coordinated and directed project implementation of 5 remote and globally distributed cross-functional teams to ensure resources were appropriately allocated, resulting in a 10% increase in delivering projects within deadlines.
- Built a song workflow to streamline and standardize the song creation process from ideation to final product for use in the production of Netflix's Super Monsters, creating 40 original songs within 12 months.

SKILLS

Back End
Node.js, Express, Ruby, Go, PostgreSQL, MongoDB, REST APIs

Front End
JavaScript, TypeScript, React, Handlebars, HTML/CSS

Cloud
Digital Ocean, AWS (ECS, EC2, IAM, Fargate, RDS) Terraform, Fly.io

Other
Git/GitHub, Docker, Linux, Bash, HTTP, OOP, Nginx, Postman

EDUCATION

Launch School ⧉   2020 — 2023

Multi-year, mastery-based software engineering curriculum. Read more at launchschool.com/employers ⧉

Purdue University   2008 — 2012

B.S. Computer Graphics, minor Art & Design