

JOEL BARTON

CONTACT



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github.com/joelbarton406



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SKILLS

Back-end

Node.js, Python, Ruby, SQL, MongoDB, Express.js, Sinatra, Postgres, Server Sent Events (SSE), REST APIs

Front-end

JavaScript, TypeScript, React, HTML/CSS, jQuery, Bootstrap, TailwindCSS, MaterialUI, shadcnui, Handlebars

Cloud

AWS (Lambda, EC2, API Gateway, SDK, S3, SSM, Cloudwatch, EventBridge, VPC) Digital Ocean Droplet, Heroku, Fly.io

Other

Git, Docker, Bash, OOP, PostMan, Jest, WebSockets, Linux, Vitest, Nginx

EDUCATION

Whitman College

May 2020

B.A. Religious Studies

Launch School

Software Engineering & Full-Stack Web Development

launchschool.com/employers

PROFILE

I am a full-stack software engineer proficient in TypeScript, Ruby, and Python. I thrive on tackling complex problems that deliver joy to users. Most recently, I created Harrier, an open-source framework that helps developers achieve faster CI/CD builds in GitHub Actions. In my spare time, I enjoy trail running and have completed multiple ultra marathon distances.

EXPERIENCE

HARRIER harrier-gha-runner.github.io | REMOTE, USA | AUGUST 2024 — PRESENT

Software Engineer / Co-Creator

Developed an open-source framework for accelerating CI/CD builds in GitHub Actions workflows by automating the deployment of an alternative runner infrastructure with a dedicated cache solution into users' AWS environment (Technologies: Node.js, TypeScript, AWS SDK for JavaScript, Bash, YAML)

- Designed VM architecture to provision ephemeral runner servers into an isolated virtual private cloud, providing users with a clean runtime environment while ensuring data security
- Created optimized caching solution targeting node modules to minimize redundant dependency installations across consecutive workflow executions achieving up to 90% reduction in installation time
- Implemented minimal footprint and robust security posture for Harrier, using an isolated VPC, OIDC, AWS Secrets Manager, and strict IAM policies
- Streamlined setup experience by providing a single YAML file that stands up the Harrier infrastructure within users' AWS environment with minimal effort
- Authored comprehensive [case study](https://harrier-gha-runner.github.io) providing in-depth analysis of Harrier's problem domain, system design, and engineering decisions (https://harrier-gha-runner.github.io)
- Collaborated with remote team spanning three time zones, following Agile methodologies and adhering to Git best practices
- Led the primary design, development, and deployment efforts for the Harrier website
- Created comprehensive system architecture diagrams and visual aids to facilitate team design discussions throughout project ideation and implementation phases

OPEN-SOURCE PROJECTS | Bozeman, MT | 2022 — PRESENT

Software Engineer

Developed a series of full stack applications including:

- *InspectHook* – Tool for inspecting webhooks and HTTP requests enabling users to inspect incoming HTTP requests. Managed the backend using Node.js and Express.js for API handling, MongoDB and PostgreSQL for data storage, and deployed on a Digital Ocean Droplet VPS with Nginx as a reverse proxy. Integrated a user-friendly dashboard to provide real-time request inspection for seamless debugging
- *Engagements* – Web application for managing and tracking professional engagements (Technologies: Express, Postgres, React, TypeScript)
- *eCart* – An e-commerce shopping cart (Technologies: JavaScript, React, Express, MongoDB)

UPS | Seattle, WA | 2020 — 2021

Package Car Driver

Navigated dynamic delivery routes and schedules during a period of heightened demand and uncertainty, balancing speed and public trust. Demonstrated strong adaptability and a commitment to reliability in a fast-changing environment, ensuring timely and secure deliveries.