Matthew Johnston

Software Engineer

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Experience

2023 – present — **Software Engineer, Creator,** *Herald* ⍈

Herald is an observability solution that allows software developers to conveniently collect and explore telemetry data, including logs, traces, and metrics, through a single, user-friendly interface.

- Engineered the automatic provisioning and deployment of a data pipeline for the collection, processing, storage, and visualization of logs, traces, and metrics data
- Created CLI tool to facilitate set-up, configuration, deployment, and tear-down of the ELK stack—Elasticsearch, Logstash, and Kibana—on AWS
- Automated cloud deployment of multiple Elasticsearch and Logstash clusters, and a single node of Kibana using AWS CDK
- Architected the generation and storage of certificates to ensure secure communication of pipeline components using TLS encryption
- Containerized components of pipeline infrastructure with appropriate dependencies and runtime environments using AWS ECS
- Engineered service discovery using AWS Cloud Map to ensure successful communication among infrastructure components
- Implemented auto-scaling of Elasticsearch cluster based on a CPU-utilization target
- Authored comprehensive case study ⍈ discussing the use case, design decisions, and implementation challenges experienced when building Herald
- Collaborated with a remote team of 4 developers across Canada and the U.S. using agile workflow

2019 – 2023 — **Software Engineer,** *Self-Employed*

A few of the projects & technologies used during this time:

- PanicBin: an application for receiving and debugging webhooks (Node, Express, MongoDB, PostgreSQL, React)
- SwiftCart: an e-commerce shopping-cart app (Node, Express, MongoDB, React)
- TaskMate: a task management app that allows users to build todo lists and track their tasks (Node, Express, JavaScript, Handlebars, HTML, CSS)

2015 – 2022 — **Writer,** *Investopedia*

Wrote finance- and economic-related articles.

2015 – 2021 — **Adjunct Professor,** *St. Stephen's University*

Taught Intro to Macroeconomics and Intro to Southeast Asian History.

Technical Skills

Languages/Frameworks
JavaScript, TypeScript, Ruby, Go, Python, Express, SQL, React, HTML, CSS, Jest

Other Technologies
Git/GitHub, Node.js, Docker, Nginx, PostgreSQL, MongoDB, RESTful APIs, Linux

Cloud
Digital Ocean Droplet, AWS (CDK, ECS, EC2, Fargate, Cloud Map, Lambda, and EFS), Heroku

Education

2012 – 2014 — **M.A. Economics,** *The New School for Social Research*

2003 – 2007 — **B.A. Interdisciplinary Studies,** *St. Stephen's University*