Matthew Sisserson

✉ masisserson@gmail.com   ⚲ Boston, USA   ✪ masisserson.dev

PROFILE

I'm a full stack software engineer with a passion for understanding and solving problems. Most recently, I created Otto, an open-source automated ETL workflow manager built with Express.js, React, and PostgreSQL. I've built, designed, and solved using the Ruby, JavaScript, and Go ecosystems, and I'm always looking for a reason to learn something new.

TECHNICAL PROJECTS

Otto, *Creator, Software Engineer - www.otto-etl.com*   2023

Otto is an open-source, web-based, automated ETL workflow manager that orchestrates the gathering, transforming, and loading of data at scheduled intervals.

- Created an automated workflow management application capable of extracting 200K+ PostgreSQL database rows using Express.js, React, and PostgreSQL
- Built a streamlined and intuitive client-facing UI which included responsive animations, drag-and-drop nodes, and pop-up modals using React, React Flow, and Material UI
- Constructed a working system for acquiring and executing arbitrary user code against incoming extraction data by using Node.js VM and Code Mirror 6
- Generated a recursive workflow execution algorithm enabling parallel task executions and increasing a workflow's maximum nodes from 5 to 30+
- Implemented real-time tracking of workflow execution instances and 7 types of metrics in PostgreSQL and reporting of that data through server-sent events
- Orchestrated a data management system for staging workflow data as it passed through extraction, transformation, and loading steps
- Integrated OAuth 2.0 client credentials flow to facilitate the extraction of data from secured API endpoints
- Containerized application using Docker, achieving an 80% reduction in installation and configuration time
- Led standups, sprint planning sessions and weekly retrospectives for a four-person remote team
- Authored a comprehensive case study on the creation and design of Otto

Independent Projects, *Self-employed Software Engineer*   2020 – 2023

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

- RequesterBin - a real-time application for receiving & debugging webhooks (Express, Ruby, React, Nginx, DigitalOcean Droplet, PM2)
- YourProperty - a property management application (Ruby, Sinatra)
- Shopping Cart - a database-backed e-commerce app (React, MongoDB, Node)

PROFESSIONAL EXPERIENCE

Laboratory Technician, *Hiram College*   2015 – 2019

- Developed a custom filter holder and black box which increased spectrophotometer effectiveness by 250% and saved the lab $20,000 in equipment expenses

Admission Office Clerk and Tour Guide, *Hiram College*   2015 – 2017

- Scheduled campus visits for 255 prospective students, generating $2.6 million for the college through prospective student admissions

---

SKILLS

Backend
Ruby, Node.js, Express, Go, PostgreSQL, MongoDB, RESTful APIs

Frontend
JavaScript, React, HTML/CSS, jQuery, MaterialUI

Other
Docker, Git, Linux, Bash, DigitalOcean, Heroku

EDUCATION

B.A., Biochemistry, *Hiram College*   2015 – 2019

Software Engineering & Full-stack Web Development Training,   2021 – 2023
Launch School