

Jing Zhu

Software Engineer

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PROFESSIONAL EXPERIENCE

Creator, Software Engineer

2023

Otto 

Designed, prototyped and implemented Otto, an open-source, ETL workflow automation tool for scheduling, executing and monitoring of ETL data pipelines.

- Wrote a recursive algorithm that orchestrates the parallel execution of tasks using promises and memoization
- Automated the creation of cron jobs for workflow executions using Node-Cron
- Built modularized backend that enables speedy continuous development
- Constructed a system for acquiring and executing arbitrary user code against multiple sources of data using Node-VM
- Created metrics and logging for execution history that streams to the frontend in real-time using server-sent events
- Developed an intuitive React frontend using React Flow that enables users to create workflow in a drag-and-drop manner
- Containerized Otto using Docker, achieving an 80% reduction in installation and configuration time
- Collaborated with a remote team of 4 engineers using an agile workflow
- Authored Otto's comprehensive technical case study and gave a live tech talk about Otto

Software Engineer

2021 – 2023


Self-employed

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

- Chew Chew Runs: An endless runner game that features continuous procedural generation of levels, obstacles, perks and power-ups (C#, Unity Engine)
- MessageBin: a real-time application for receiving & debugging webhooks (WebSocket, Nginx, DigitalOcean Droplet, PM2)
- Shopping Cart: a database-backed e-commerce app (React, MongoDB, Node)

Senior Manager, Drug Sourcing Risk Analytics

2016 – 2021

Cigna (Express Scripts) 

- Worked with a team of software engineers, designed and implemented a web-based risk management tool that analyzes supply chain risks
- Designed intricate algorithms to measure risk from various aspects
- Created and maintained the risk databases

EDUCATION

Masters of Science in Supply Chain Management

2015 – 2016

Washington University in St. Louis

Bachelor of Finance and Operations Management

2008 – 2012

Singapore Management University

SKILLS

Languages and Framework

JavaScript, TypeScript, Node.js, Express, React/Redux, Ruby, Sinatra, C#, Golang, Python

Cloud

AWS(Lambda, RDS), Heroku, DigitalOcean

Other Technologies

PostgreSQL, MySQL, MongoDB, Linux, HTTP, OOP, REST APIs, Git/GitHub, Docker, OAuth2.0, Nginx, HTML/CSS, Tableau, PowerBI