

Technology Skills

Front End: Typescript, Node.js, React, Vue, Redux, Prisma, Jest, Cypress

Back End: Python, Django, Flask, SQLAlchemy, Pytest, PHP; Some Scala, Haskell, Rust

DevOps: Azure, AWS, Docker, SQL, Linux, Windows Server; Some Terraform, Kubernetes

Experience

Developer, Fosforescent (attempted SaaS startup), Louisville, KY (Remote)

2023-2024

Application

- Designed a task management / workflow system which can be developed into a visual programming language
- Implemented feature prompting ChatGPT to suggest workflows by suggesting subtasks
- Created typescript & react **UI library** to allow navigating & drag & drop editing of graph structure
- Created libraries for visual presentation of graph-rewriting system & storage of available nodes
- Created stripe subscription integration (first in Rust, switched to Typescript)

Infrastructure/DevOps

- Developed CI/CD pipeline with github actions
- Developed Infrastructure as code repository using Terraform, automatically provisioning Kubernetes instance, databases, creating appropriate secrets for production and development, as well as ArgoCD instances
- Created pipeline for automating Docker Build & Kubernetes deployment for backend

Research

- Researched graph rewriting systems, combinator systems, & dependent type systems to understand requirements for allowing checklists to be extended into graph-rewriting based visual language

Lead Full Stack Engineer, Dojo, New York, NY (Remote)

2021-2023

- Designed and implemented a CI/CD pipeline in Heroku & GitHubActions and added an entire test suite using Cypress, Pytest, and Jest tests.
- Introduced Docker & Docker Compose local development & testing environment
- Created & maintained production, testing and dev environments in Heroku, AWS, passing rigorous security review processes.

Features

- Improved performance and maintainability through multiple phases of refactoring front end and back end, including adding progressive loading to d3 force graph visualization, improving DB schema
- Increased performance of endpoint from several minutes to under 10 seconds for large projects, increasing feasible project size by 100x+
- Added AWS Lambda function with AWS Serverless Application Module to handle log drain
- Designed & implemented concept of groups, group member, node hierarchy
- Implemented new admin UI to conform to JWT auth requirement of 3rd party pen test

Management

- Led remote team of 1 FT engineer as well as 2 regular full time contractors
- Responsible for validating feature implementation plans, code review, quarterly feedback

Senior Full Stack Engineer, <i>Care.Coach</i> , Millbrae, CA	2018-2021
<ul style="list-style-type: none"> - Designed & created Django-based internal service to house updated schema + machine learning models & integrations as well as collected, monitored & analyzed performance metrics and logs for reporting - Upgraded video streaming architecture from Flash/RTMP to HTML5/WebRTC by implementing web client, server configuration, guiding implementation of Android mobile client - Upgraded security to meet standards of major client 3rd party security audit - Integration with hospital EMR & our cloud-hosted SQL Server DB using Java Spring 	
<i>DevOps</i>	
<ul style="list-style-type: none"> - Introduced automated testing using Selenium - Created & maintained production, testing and dev environments in Azure - Completed migration of production & staging infrastructure from dedicated linux server to Azure with minimal downtime 	
Independent Contractor, <i>David M Noll LLC</i> , Louisville, KY	2014-2015, 2017-2018
<ul style="list-style-type: none"> - Created web applications in PHP, JavaScript, AWS EC2, shared hosting - Designed and implemented Python desktop application for cryptocurrency trading 	
Interactive Developer, <i>JUMP by LEAP agency</i> , Louisville, KY	2015-2016
<ul style="list-style-type: none"> - Development with WordPress, Laravel or PHP/HTML, MySQL, JavaScript 	
IT Consultant, <i>Derby City IT</i> , Louisville, KY	2012-2013

Open Source

ChkFlow: a React component editor/view for tree data inspired by Workflowy's interface

Netcode: work in progress - a neuron-wise neural net library & playground

Pixel Time: work in progress - a web3 dApp that allows users to collaboratively edit an image

GLTrader: desktop app for real-time monitoring of cryptocurrency market data via Bittrex API

Education

<i>Rensselaer Polytechnic Institute</i> , M.S. in Global Enterprise Management	2010
<i>Case Western Reserve University</i> , B.A. in Cognitive Science	2008