

Technology Skills

Javascript: Typescript, Node.js, React, Vue, Solid.js, Redux, Prisma, Jest, Cypress

Python: Django, Flask, SQLAlchemy, Pytest

DevOps: Azure, AWS, Heroku, Docker, MySQL, PostgreSQL, Linux, LAMP, Apache, IIS Networking, Github Actions

PHP: extensive experience in past, Yii, Laravel, WordPress

Some: Functional programming, Scala, Haskell, Java, Android, Rust, Ethereum / Web3, Terraform, Kubernetes, Machine Learning, Math/Statistics

Experience

Solo Developer, Fosforescent, Remote

2023

- Researched and applied elements of combinator systems & programming language design
- Designed content addressed DAG data structure, along with methods to query sub-graphs of graph using pattern matching
- Designed Distributed Hash Table to maintain graphs across peers
- Designed system for caching graph rewrites & consensus algorithm for maintaining distributed cache
- Implemented structural editor for mobile web

Lead Full Stack Engineer, Dojo, New York, NY / Remote

2021-2023

Infrastructure/DevOps

- 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, Care.Coach, Millbrae, CA

2018-2021

Architecture

- 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

Features

- 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 Ops
- Introduced automated testing using Selenium
- Created & maintained production, testing and dev environments in Azure

Independent Contractor, *David M Noll LLC*, Louisville, KY 2014-2015, 2017-2018

- Created web applications in PHP, JavaScript, AWS EC2, shared hosting
- Designed and implemented Python desktop application for cryptocurrency trading

Interactive Developer, *JUMP by LEAP agency*, Louisville, KY 2015-2016

- Development with WordPress, Laravel or PHP/HTML, MySQL, JavaScript

IT Consultant, *Derby City IT*, Louisville, KY 2012-2013

Projects

Fosforescent: a checklist-based collaborative workflow execution language

Netcode: a neuron-wise neural net library & playground

Pixel Time: a web3 dApp that allows users to collaboratively edit an image

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

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

Education

Rensselaer Polytechnic Institute, M.S. in Global Enterprise Management 2010

Case Western Reserve University, B.A. in Cognitive Science 2008