Richland, WA, USA
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Timothy Yang

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Objective

Software Engineer with a focus on efficient and clean code looking for opportunities to grow in the Web 3.0 field. Wish to work in a team of motivated individuals who wish to work towards the advancement of the company and its values.

Skills

- Languages: Java, JavaScript, C/C++, C#, Python, x86 Assembly
- Technologies: SQL, AWS, Git, Linux, Figma, HTML/CSS
- Courses: Data structures, Algorithms, Databases, Operating Systems, Cloud Computing, Networking and Distributed Systems, Natural Language Processing, Cyber-Physical Systems

Projects

- **Notes App (2022)** - A web app for creating and saving notes for logged in users. Developed using React, AWS (Lambda, DynamoDB, S3, CloudFormation), GraphQL, CI/CD, and Auth.
- **mktah-bot (2020) –** A Discord bot that takes commands and reads/writes data from Google Sheets API. Created using Python, is automatically deployed on Heroku integration with GitHub CI/CD
- **Tetris (2016) –** Class project coded in Java, this game utilizes the MVC model and was unit tested using JUnit. Additional testing was done for 100% code coverage to comply with standard coding conventions.
- **MKCK (2017)** – Static Mid-Columbia Korean Church website created using HTML, JavaScript, SASS, and PHP. It is hosted on Google Firebase. (mckchurch.com)

Work

Freelance Software Engineer (Web) **2020-current**

- Developed an application to deploy smart contracts to the Ethereum blockchain network to grant tokens to customers. Used React, Alchemy, Solidity, HardHat, Tailwind CSS.
- Currently working on a wedding application for a wedding. Uses Figma, React, YouTube API for live streaming, AWS CloudFormation, DynamoDB, Route 53.

Software Engineer **Idaho National Laboratory** **2014 - 2015**
Safety Research team Idaho Falls, ID

- Developed an application in C# to download topography data using Google's API using latitude, longitude, and scale. 90% accurate down to 5-10 meters. Used in 3D simulations to test nuclear facility safety. Previously, the simulations were modeled on a flat surface, so using real topographical terrain greatly improved the accuracy of the simulations.
- Developed a tool to automate calculation of the flow and pressure of fluids hitting objects in 3D simulations.
- Created a TypeScript definition file for a JavaScript library (MxGraph) with over 240,000 lines of code. MxGraph is a diagramming library that enables interactive graph and charting applications.
- Created a web application version of the topography application. The objective was to make it more accessible and user friendly. Developed using HTML5/CSS3/JavaScript and MySQL.
- Researched and developed WebGL technology implementations for 3D modeling simulations. The idea was to create simulations with libraries like three.js to interact with simulations.

Education

- **BS. Computer Science & Systems,** University of Washington, Tacoma. **2017 - 2018**

Publications

- S. Prescott, C. Smith, T. Koonce, T. Yang, "Case Study for Enhanced Accident Tolerant Design Changes," Idaho National Laboratory, INL-EXT-14-32355, June 2014.
- S. Prescott, R. Sampath, C. Smith, T. Yang, "Advanced SMR Licensing," Idaho National Laboratory, INL-EXT-14-32978, September 2014.