JEFF MA

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SKILLS 💻

Languages: HTML, CSS (Sass), JavaScript (TypeScript), PHP, Swift, Python, Golang, Java, C, C++, SQL, Verilog
Tools/Frameworks/Libraries: Material UI, React / Redux, Next.js / Express.js, Knex.js, Scikit-Learn, Arduino
Concepts: Responsive Web Design, Version Control (Git), Search Engine Optimization (SEO), Model View Controller (MVC)

CAREER HISTORY 💼

Data Engineer @ ContextLogic Inc (Wish.com) *01/2022 - 04/2022*

- Reduced already seen video suggestions by 82% from 25500 daily duplicate suggestions using a Golang Bloom Filter, saving Memcached space used by a factor of 10
- Increased product video views by 101.4% by optimizing a Presto SQL query to compute popularity scores by gender

Frontend Developer @ Showfloor Inc *01/2021 - 03/2021*

- Increased landing page performance to 95% by using Next.js image compression and SEO (Search Engine Optimization)
- Added a business card display and a candidate evaluation tool using Redux, GraphQL and HTTP web services
- Removed 500+ lines of code bloat through code refactoring to reuse React and Material UI components

Web Developer (LAMP) @ Horizon Studios Inc *05/2020 - 09/2020*

- Enabled 10+ large clients to provide feedback on content by building an embedded form using React, Redux, Laravel and MySQL
- Reduced onboarding time to 1 week by writing technical documents on procedures and lessons on development processes

Full Stack Developer @ Environment Canada *09/2019 - 12/2019*

- Improved time spent consolidating data into reports by 80% by architecting an automated CSV data exporter (using HTML, CSS, JS, jQuery, Bootstrap, PHP and PostgreSQL)

iOS Mobile Developer @ Startuptive Inc *01/2019 - 04/2019*

- Developed a prototype with 8+ XCode Views using Swift and SQLite that integrates with smart appliances and helps owners register and manage their usage by customers

PROJECTS 🎨

Web Team Co-Lead @ Waterloop | (website) | (github) *01/2022 - present*

- Onboarded 6 new members and delegated 10+ tickets for 4 major full stack projects
- Oversaw the construction of an Applicant Tracking System web app to manage 50+ Waterloop applicants per term
- Designed 4 tables using Knex.js and PostgreSQL, 6 backend APIs using Express.js and 7+ integration tests using Chai/Mocha
- Translated 3 Figma page designs into React-Redux responsive implementations, allowing navigation and note autosaving

MapIT @ HackTheNorth | (devpost) | (github) *09/2021*

- Built a Natural Language Processing (NLP) mind map generator that saves 10+ minutes of manual labour using a Universal Sentence Encoder TensorFlow model, a Minimum Spanning Tree algorithm, and a Keyword Extractor Machine Learning model

Cloud Pickup @ HackTheNorth | (devpost) | (github) *09/2018*

- Organized a team of 4 to build a litter collection AI with 90% accuracy on randomly generated data for a virtual robot by training an unsupervised Machine Learning model using Scikit-Learn

ACADEMIC BACKGROUND 🎓

University of Waterloo | Candidate for BASc - Computer Engineering | GPA: 90.26 / 100 *09/2018 - 04/2023*

- Currently taking Intro to Machine Learning, analyzing and training models on data using Python and the Kaggle online platform
- Evaluated different hypothesis tests using R on statistical data to determine whether to accept / reject null hypotheses
- Developed a language recognizer and parser using the Visitor design pattern, Java and Parboiled
- Implemented a pipelined processor using Verilog that handles simple data hazards and stalls
- Simulated node packet processing for a CSMA/CD network system using Python, Matplotlib, and concurrency for efficiency
- Implemented a real-time operating system with priority scheduling, interrupt handler and timer support using C and Keil uVision