Joseph Hu

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Education

University of Waterloo | Bachelor of Computer Science | 91% Major Average | Sep 2017 – Dec 2022

Skills

Languages TypeScript · Go · Python · C# · Java · SQL · C++ · Ruby

Technologies Node · React · GraphQL · ASP.NET · ANTLR · Docker · MongoDB · Rails · Git

Experience

Databricks | Software Engineer Intern

May 2022 - Present | San Francisco

- Improved DBSQL autocomplete to support user-defined functions and dynamically fetched functions in TypeScript, opening new avenues for SQL Editor users and increasing function coverage by 20%
- Created a PoC for generating DBSQL parsers using ANTLR and the SparkSQL grammar, increasing the code coverage of our parser from 40% to 99% and reducing the number of false error highlights by 80%

Adeptmind | Full-Stack Developer Intern

Aug 2021 – Dec 2021 | Toronto

- Owned an image background colour detection algorithm and integrated it into our data processing pipeline (Python) which was leveraged to give a consistent look to our 10M product catalogue
- Developed an **image processing pipeline** to support multi-sized variants improving **TTI** and **SEO** scores
- Dockerized existing Prefect workflows and created a PoC for migrating them to run within Kubernetes
 Jobs in order to cut the costs of running out data pipelines by 10%

StackAdapt | Software Developer Intern

Jan 2021 – Apr 2021 | Toronto

- Contributed towards significantly increasing the productivity of customers by developing several core components of a bulk-editor feature using React/Redux in TypeScript
- Modified Rails backend and Go micro-services to introduce new datasets into user-requested reports

Thomson Reuters | Software Developer Intern

May 2020 - Aug 2020 | Toronto

- Developed web pages and API endpoints using **ASP.NET MVC** framework powering **1,000+** clients
- Investigated numerous complex bugs by deep-diving into a multi-tiered codebase with 16,000+ files

PointClickCare | Software Engineer Intern

Sep 2019 - Dec 2019 | Mississauga

- Developed security functions for numerous API endpoints using **Java/Spring** to prevent JSON injection
- Utilized Selenium and the POM to create both unit and E2E tests, increasing code coverage by ~10%
- Created stored procedures and queries using **SQL** to manage and update **100+** production databases

Finastra | Software Developer Intern

Jan 2019 – Apr 2019 | Mississauga

- Facilitated the **migration** of message-oriented middlewares resulting in a more maintainable codebase
- Developed and updated a robust set of API endpoints with **ASP.NET** given a set of specifications
- Implemented a system for dynamic endpoint retrieval from design to production using SQL and C#
- Refactored an existing HTTP request factory to use template types, saving 100+ lines for each model

Projects

UW Blueprint - Sistering | 💭

 Worked as a senior developer at UW Blueprint – a student-run initiative to help build tech solutions for non-profits. We are creating a volunteer scheduling system for the Sistering organization.