

Tahmeed Mostafiz

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Skills

Languages: Python, C++, TypeScript, Kotlin, Dart, C, Bash, R, XML, HTML, CSS

Technologies: React, Node, GraphQL, PostgreSQL, MongoDB, Firebase, Flutter, AndroidStudio, Docker, Heroku

Education

University of Waterloo

CANDIDATE FOR B.S. IN COMPUTER SCIENCE

- Cumulative Average: 92.0 (3B), Computer Science Upper-Year Scholarship
- Relevant Courses: *Algorithms, Operating Systems, Data Structures and Data Management, Object-Oriented Software Development*

Experience

Wish

Toronto, Canada

SOFTWARE DEVELOPER

Jan 2022 - Apr 2022

- Software Developer on Wish's Marketplace payments team working with **Python, MongoDB, GraphQL, Superset**
- Optimized bulk processing of one-time payments by **batching** and queuing for **backend workers**, saving Accounting team **10 hrs/month**
- Designed payment validation logging schema, stored on **Prometheus**, and visualized on **Grafana** in daily crons that process over **9M** payments

HomeX

Toronto, Canada

SOFTWARE DEVELOPER

May 2021 - Aug 2021

- Introduced Flutter web support for **Twilio Video** utilizing **event listeners, streams** and **js interop** garnering **150+** likes on *pubdev: PR*
- Built a Backend For Frontend (**BFF**) with a **GraphQL** API, integrating multiple **micro services** and consumed by **client-facing** applications
- Launched cross-platform modularized video-calling - pitched at **company-wide** presentation and wrote formal feature proposal (**PR FAQ**)
- Implemented logic using **native Android** code to offload tasks in the background decreasing app startup time by **45%**
- Redesigned HomeX app's homescreen using **null-safe** Flutter UI and various service managers adhering to **MVVM** architecture using **MobX**

TD Bank

Waterloo, Canada

SOFTWARE DEVELOPER

Sept 2020 - Dec 2020

- Built an interactive site with embedded playlists and slideshows for virtual events - **won** TD Hackweek and presented to **SVP** of TD Bank
- Safeguarded database changes using **atomic transactions** and **optimized** HTTP requests by **34%** by **caching** data in Firebase's global CDN
- Developed an invoicing app using **Flutter** with **event-triggered** cloud functions to perform **CRUD** and generated unique invoice webpages
- Automated user authentication and interac request money-flow with **puppeteer** scripts utilizing **async/await** patterns and the **js event loop**

UWBlueprint

Waterloo, Canada

PROJECT LEAD

Sept 2021 - Present

- **Lead** team of developers and designers to build a **full-stack** application for an NPO using **React, Node (Express)** and **PostgreSQL**
- Designed **relational database schemas**, configured **CI/CD pipelines**, and **dockerized** application to facilitate friction-less development
- Setup staging and prod environments on **Heroku**, optimized for **client's budget constraints** and managed secrets using **Vault**
- Implemented **Sequelize (ORM)** models with complex associations featuring **transactions, constraints** and **eager loading** - tested using **Jest**
- Facilitated weekly work-sessions, bi-weekly client meetings, 1 on 1s, sprint planning, code reviews, debugging support and of course, socials!

Projects

Subleeteer

MONGODB, EXPRESS, REACT, NODE, REDUX, JWT

- Built with **React hooks** and **Redux**; leveraged **Google Places API** to power address autocompletion and provide geolocation services
- Created a set of services using **Express (Node)** and **MongoDB** to allow the UI to retrieve filtered listings and user data
- Implemented user authentication on Nodejs using **JWT Tokens** and **bcrypt**

UWScheduler

ANGULAR, BOOTSTRAP, MATERIAL, FLASK

- Implemented the **Angular** UI elements using **Material/Bootstrap** components and handled user input by leveraging **Reactive Forms**
- Developed **REST APIs** (backend) using **Flask** for parsing the **JSON responses** scraped from various sites
- Improved page load time **by 20s** by developing a **caching** solution for previously scraped data

Watopoly

C++

- Built a command-line version of Monopoly utilizing **MVC, Observer, Visitor** and **RAII** design patterns
- Utilized an effective **git branching model, peer reviews** and **regression testing** to ensure bug-free code