

Tahmeed Mostafiz

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Skills

Languages: Python, Golang, C++, C, TypeScript, Kotlin, Dart, Bash

Technologies: AWS, Kubernetes, Docker, Node, GraphQL, PostgreSQL, MongoDB, Gitlab

Education

University of Waterloo

CANDIDATE FOR B.S. IN COMPUTER SCIENCE (EXPECTED MAY 2024)

- Cumulative Average: 92.0 (4A), Computer Science Upper-Year Scholarship
- Relevant Courses: *Algorithms, Networks, Database Management, Operating Systems, Security and Privacy, Software Delivery*

Experience

Splunk

San Jose, USA

SOFTWARE DEVELOPER INTERN

May 2023 - Aug 2023

- Pioneered NetworkSets, a **Kubernetes** CRD **automating network provisioning** on AWS, reducing **developer bandwidth** and **service costs**
- Crafted an **RFC**, analysing state, weighing solutions, and gathering cross-functional feedback; approved and adopted by **senior team leads**
- Managed adoption and release of networks into a set using **label selectors** with an **Operator** pattern minimizing disruption to existing system
- Implemented a **capacity-based** strategy in **Go** that **dynamically scales** network resources, leading to more effective utilization of services
- Deployed on **prod envs** achieving **99% uptime** with no manual intervention by leveraging rigorous tests, monitored logging and **gated rollout**

Rippling

San Francisco, USA

SOFTWARE DEVELOPER INTERN

Sept 2022 - Dec 2022

- Conducted **fault-tolerant, concurrent** execution of **1000+** tests using **Temporal** workflows and **go channels**, reducing execution time by **60%**
- Spearheaded **team-wide** adoption of Temporal including server **setup with certs**, designing app architecture, and presenting **runbooks**
- Imported data from prod to various staging envs by leveraging **temporal queues**, workers deployed in different envs and **S3 presigned urls**
- Developed a client info dashboard on **Retool** populated using complex SQL with multi-criteria **filtering** and **cursor-based pagination**

Wish

Toronto, Canada

SOFTWARE DEVELOPER INTERN

Jan 2022 - Apr 2022

- Facilitated bulk processing of one-time payments by **batching** jobs and queuing for **backend workers**, saving Accounting team **10 hrs/month**
- Engineered invoices aggregating data from **nested MongoDB** collections and **SQL**, streamlining processing and enhancing data consolidation.
- Ensured optimality by leveraging **parallel** workflows uploading to **S3** simultaneously and handled scale by using the **decorator** pattern
- Updated **production** payment eligibility logic and disbursement flow for Chinese merchants in **high priority** response to lockdowns in China
- 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 INTERN

May 2021 - Aug 2021

- Introduced Flutter web support for **Twilio Video** utilizing **event listeners**, **streams** and **js interop** garnering **200+** likes on *pubdev: PR*
- Built a Backend For Frontend (**BFF**) with a **GraphQL** API, integrating multiple **microservices** that were consumed by **client-facing** applications
- Launched **cross-platform, modularized** video-calling - pitched at **company-wide** presentation and wrote formal feature proposal (**PR FAQ**)
- Implemented background task offloading logic using **native Android**, reducing app startup time by **45%** and improving overall user experience

TD Bank

Waterloo, Canada

SOFTWARE DEVELOPER INTERN

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 **pupeteer** scripts utilizing **async/await** patterns and the **js event loop**

Projects

UWBlueprint

Waterloo, Canada

PROJECT LEAD

Sept 2021 - Apr 2022

- **Led** 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!