

TOOLS AND LANGUAGES

- Microservice | Distributed Systems | Backend | Java | Python | Postgres | SQL | Springboot | OOP | Docker | React | Unit
- Azure Cloud & DevOps | Kubernetes | Cloud Computing | CI/CD | ArgoCD | Linux | Shell | Terraform | Helm | Datadog

TECHNICAL WORK EXPERIENCE

Cloud Engineer – ThoughtWire, Toronto, ON

May 2022 – Sept. 2023

- Managed and developed several **Azure** cloud environments, Kubernetes clusters, app releases, microservices, CI/CD automations, disaster recovery/backups and monitor metrics
- Identified database deployment flaws and developed solutions that **eliminated outage times**, improved versioning and standardized the process across numerous projects
- Integrated and developed custom Oauth 2.0 SSO functionality with the ability to authenticate using OIDC & SAML protocols into both mobile and web products, significantly **improving customer experience**
- Generated numerous Python scripts to monitor the performance of Linux VMs, greatly **reducing application outages**
- Integrated monitoring service SDKs such as Datadog across mobile apps (iOS and Android), Kubernetes clusters and Virtual Machines, **increasing observability** and reducing time needed to identify bugs
- **Enhanced reliability and security** of web app by employing an application gateway and implementing high availability via HAproxy and Keepalived

Software Engineer – ThoughtWire, Toronto, ON

June 2021 – May 2022

- Developed, containerized and deployed many Spring based **Java microservices** to cloud-hosted **Kubernetes** clusters
- Designed and developed numerous **RESTful** and **GraphQL APIs** using server-side technologies such as **caching**, **asynchronous processing** and **multi-threading** to facilitate usage of microservice architecture
- Significantly contributed to the creation of a message brokering service utilizing a **publish-subscribe pattern**
- Created, optimized and maintained an extensive array of complex database queries, table schemas, relationships and stored procedures using **Postgres**
- **Enhanced security** of microservices by enforcing token based authentication utilizing Spring's Security Filter
- Seamlessly integrated numerous external **third-party APIs** and SDKs into our existing microservice architecture

Data Engineering Intern – ThoughtWire, Toronto, ON

Sept. 2020 – Dec. 2020

- Created exhaustive test suites to ensure proper functionality of services utilizing **Junit**, **JMockit** and **Mockito**
- Developed & deployed an anomaly detection service onto Azure, turning siloed data into actionable insights in real time
- Created numerous **Python** scripts & **stored procedures** to consolidate disparate user data, improving process efficiency

Product Management Intern – ThoughtWire, Toronto, ON

Jan. 2020 – Apr. 2020

- Adapted and refined performance tracking system, creating a streamlined process and greater accessibility for end users
- Spearheaded user interviews to gather data on customer pain points, resulting in a refined and validated product roadmap

TECHNICAL PROJECTS

Rate My Beach

June 2023

- Engineered a **React**-based web application, leveraging a Java backend and a Postgres database, to effectively visualize and prioritize beach cleanliness ratings submitted by users, **optimizing targeted beach cleanup initiatives**

Surf's Up

Feb. 2022

- Developed a web app with a **Javascript** frontend, Java backend and Postgres database to allow surfers to subscribe for email notifications for when a specific beach break has waves of their desired size

EDUCATION

University of Waterloo

Sept. 2016 – Apr. 2021

Bachelor of Applied Science - Civil Engineering

National University of Singapore

Aug. 2019 – Dec. 2019

Bachelor of Applied Science - Civil Engineering