

Kyle Lee

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Skills

Languages: C, C++, C#, Golang, Python, JavaScript, HTML5, CSS3, MATLAB

Tools / Frameworks: .NET Core, GraphQL, SQL, PostgreSQL, Kafka, Redis, EC2, Docker, Kubernetes, BigQuery, Sklearn

Version Control: Git, Microsoft TFS, Azure

Work Experience

Software Engineering Intern, Dapper Labs, (Vancouver BC)

May 2022 – Aug 2022

- Led the design and development of a recommender system for a search engine using **Golang, Python**, and **GCP BigQuery**
- Implemented logistic regression models and collaborative/content filtering with **sklearn**, increasing P2P sales by **23%**
- Designed smart contracts for in-house blockchain **Flow** to support an NFT ownership and minting pipeline using **Cadence**
- Developed sorting, filtering, and pagination backend logic using **Golang, GraphQL, PostgreSQL, Kafka**, and **gRPC**

Software Engineering Intern, Plenty of Fish, (Vancouver, BC)

May 2021 – Aug 2021, Jan 2022 – Apr 2022

- Developed and maintained features in a payments system architecture with 200,000,000 registered users
- Designed and implemented a new scalable automatic pricing service that reduced DB load by **99.99%** using **C#** and **Redis**
- Led the migration of the payments system to a CRM platform using **Kafka, C#**, and **Python**
- Implemented an on-call pager system to alert developers of critical errors using **Terraform, Azure** and **Python**
- Developed new discounting features for payment flow using **C#**, **Kafka** (data pipeline), and **Redis** (caching)
- Designed template for deploying **Kubernetes** jobs for internal services, using **Kubernetes, Docker**, and **Bash**

Software Developer Intern, Bell & Howell, (Waterloo, ON)

Sep 2020 – Dec 2020

- Developed features in **C++** and **C#** for Bell & Howell's QuickCollect Rx product, an automated pharmaceutical system
- Reduced runtime of authentication and payment middleware by **25%** by optimizing backend logic
- Led the frontend design and API integration of all pages in the application using **C#** and **XAML**

Junior Software Engineer Intern, Health Canada, (Ottawa, ON)

Jan 2020 – Apr 2020

- Developed scalable **WPF** applications using **C#**, **XAML**, and **VBA** for streamlining Canada's drug approval process
- Created a process that sends automated queries to a **PostgreSQL** database using **Entity Framework 7**
- Automated all daily **API**, **Web**, and **Windows** test suites using **C#** and **Python**

Research and Validation Intern, Photon Design (Oxford, UK)

Jul 2018 – Sep 2018

- Conducted research on the effects of parasitic light reflection in various mediums and geometries using simulation software
- Extended unit test coverage on new software builds with **Python** and **Robot Framework**
- Wrote an [article](#) focused on presenting a new design of a multimode interference coupler, tested using photonics modelling and optimization software

Education

University of Waterloo

2019 – 2024

Candidate for the Bachelor of Applied Sciences, Computer Engineering

- Ranked within the **top 3%** of the ECE engineering cohort (#7/225), 3x Engineering Dean's List distinctee

Templeton Secondary School

2016 – 2019

British Columbia High School Diploma

- Graduated with the **highest** overall average in grades 10, 11, and 12 out of a class of 150 students