# Minh Thong Mai

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## EDUCATION

**Carleton University** Ottawa, Ontario, Canada

**CGPA:** 11.65/12 (A+)

Honours Bachelor of Computer Science Co-op

Sept 2019 - Dec 2023 (Expected)

- o Carleton Deans Honour List in 2019, 2020, 2021
- Nominated in Golden Key Society for top 15% students in Faculty of Science in 2019, 2020, 2021

## Skills

Languages: Python, JavaScript, TypeScript, C/C++, Java, PHP, Go, HTML, SQL

Frameworks, Libraries & Tools: Vue, React, Node, Express, Flask, Linux, Pandas, AWS, Docker, K8s, gRPC, Git, Postman, Vim

## EXPERIENCE

## Software Developer Co-op

Knak, Ottawa, ON, Canada

Sept 2022 - Apr 2023

Technologies: PHP, Laravel, SQL, Vue, TypeScript, SCSS, WYSIWYG, AWS, Docker, Kubernetes

- Reduced users' wait times by 10-15 secs by applying K8s custom controllers and resources to predict future load
- Developed & deployed features' flag management service to AWS S3 using PHP, Laravel, Docker, used by 16+ users
- Built new dark/light mode feature using Vue, SCSS and E2E test, improved monthly active users by 11%
- Integrated brands' colours from user assets to TinyMCE using Vue, realized an estimated new contracts of \$350,000

**Data Analyst Co-op** Innovapost, Ottawa, ON, Canada Apr 2022 - Aug 2022

Technologies: Python, Pandas, Jupyter Notebook, SQL, TeradataSQL, ER Model, E2E Testing

- Automated data pipeline to database using Python and TeradataSQL, decreased average processing time by 70%
- o Implemented & owned data model for a data catalog project using ER modelling, used by 100+ users
- Increased E2E tests coverage by 20% for data processing service transforming raw data to metadata intake standard

#### Full Stack Developer (Tooling and Performance Co-op)

Nokia, Ottawa, ON, Canada

May 2021 - Dec 2021

Technologies: Python, JavaScript, Bash, Linux, Flask, API, Docker, React, HTML, CSS, Grafana

- o Proposed & utilized distributed crawling system to optimize data fetching scripts from Azure service using Python, resulted in an additional of 70% performance gain
- o Debugged URL's fetching errors on Linux server, increased unit tests coverage by 15%
- o Built an auto-enrollment service allowing users to edit applications' info directly using Javascript, Python, Flask and SQL, decreased average support time by 70%
- o Created live visualization dashboard in Grafana to monitor servers' performance using Javascript, SQL, provided visibility into the performance of servers in clusters

## Software Developer Volunteer (Beneficent CRM)

CU Blueprint, Ottawa, ON, Canada

Sept 2021 - Dec 2021

Contributed to a CRM web app for a non-profit organization using React, enhanced service processing time by 90%

#### **Teaching Assistant**

Carleton University, Ottawa, ON, Canada

Sept 2020 - Current

Organized weekly office hours to guide 1000+ students through materials of discrete math, C++, OOP

## **Projects**

MvPocket &

### Distributed MapReduce System &

Go, gRPC

- o Implemented a distributed MapReduce system consisting of a coordinator and a worker executing in parallel via RPC
- Specified map/reduce functions to generate and merge a set of key/value pairs, utilized resources of a large distributed system

## Cranial Stimulation Device Simulator &

C++, QMake, Qt, Agile

React.is, Node.is, Express.is, MongoDB

- Developed a medical simulator device to simulate a cranial electrical device functionalities using C++ and Qt
- Collaborated in an agile team of 4 worked through a full software development life cycle, achieved a grade of 95%

Created a private asset repository application, allowed users upload, store and share files with friends via shared links