James Ting

(514)-834-9338 | tingjamesb@gmail.com | jamesting.ca | https://www.linkedin.com/in/james-b-ting/

Education

Bachelor of Science, Computer Science Major | McGill University

Sept 2018 – Present | Montreal, Canada **Expected Graduation:** April 2022

GPA: 3.87/4.00

Awards: Quebec Ministry of Higher Education Excellence Bursary for Computer Science (2020 – 2021) **Coursework**: Software Design, Discrete Mathematics, Data Structures & Algorithms, Theory of Computation,

Programming Languages and Paradigms, Machine Learning

Extracurriculars: Co-President @ Hong Kong Student Network (Mar 2020 – Mar 2021)

Experience

Undergraduate Research Assistant | Data-Intensive Storage and Computer Systems Lab @ McGill University

Jan 2021 – Apr 2021 | Montreal, Canada | Volunteer Research Project

- Constructed **collaborative filtering** and **Monte Carlo Tree Search** systems as **real-time recommendation systems** for champions in League of Legends.
- Demonstrated the viability and scalability of Monte Carlo Tree Search for a large-scale recommendation system, with 99th percentile latency of **0.282 seconds** for Monte Carlo Tree Search.
- Built a dataset of **1,357,359 matches** using NodeJS, and developed several reward functions for

Software Developer Intern | Nuance Communications

Sept 2020 - Dec 2020 | Montreal, Canada

- Constructed a comprehensive testing suite for a gateway microservice using the **Jest** framework, resulting in **code coverage of up to 91%** across several modules.
- Developed a **NodeJS runtime configuration watcher library** to allow modifications to the configuration of microservices without requiring a redeployment of Kubernetes pods, **increasing service up-time and simplifying the codebase.**
- Designed a NodeJS POC to demonstrate the feasibility of using **OpenTelemetry** and **Jaeger** for distributed tracing in the team's microservices.

Personal Projects

Superhero Team Builder

- Constructed a superhero team builder **multi-page web application** using **ReactJS** where users can create a team of superheroes based around their statistics, and track overall team statistics
- Used the Superhero **RESTful API** for information about superheroes from the Marvel and DC universes and then displays to the user

Pathfinding Algorithm Visualizer

- Created a pathfinding algorithm visualizer web app using ReactJS and NodeJS and deployed on GitHub Pages
- Built as an educational tool to demonstrate algorithms such as **Dijkstra's Algorithm**, **A* search**, **Breadth-First Search** and **Depth-First Search**, with over 100 users at peak.

Skills and Technologies

- Programming Languages: Java, Python, C, JavaScript, OCaml
- Frameworks/Technologies: Junit5, PyTorch, ReactJS, NodeJS, Jest, Git, Docker, Kubernetes, Helm, Jira
- Languages: English (Native Fluency), French (Native Fluency), Cantonese (Advanced Fluency)
- Certifications: Glider Pilot's License, Private Pilot's License with Night Rating and Multi Engine Rating