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: 3.89/4.00
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 Project | 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.
- Scraped and filtered a dataset of **1,357,359 matches** using NodeJS, and developed several reward functions for the MCTS system

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