Ming Chun Wei

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EDUCATION

University of Toronto   Toronto, ON
MSc in Applied Computing, Artificial Intelligence Concentration, GPA 4.0   *Sept 2024 – Dec 2025*
- Courses: Geometric Deep Learning, Imitation Learning, Neural Networks and Deep Learning, and Visual and Mobile Computing

The University of British Columbia   Vancouver, BC
BSc in Computer Science, GPA 88.6 out of 100   *Sept 2019 – May 2024*
- Courses: Computer Vision, Introduction to Natural Language Processing, Applied Machine Learning, Distributed Systems, Machine Learning and Data Mining, and Introduction to Artificial Intelligence
- Teaching assistant for courses in Applied Machine Learning and Software Engineering

EXPERIENCE

Machine Learning Researcher Intern   Toronto, ON
ModiFace, L'Oreal Group Company   *May 2025 – Dec 2025*
- Presented and reviewed state-of-the-art research in **generative AI**, synthesizing findings into actionable insights that shaped project direction and experimentation
- Fine-tuned **diffusion-based text-to-image generative models** with concept personalization techniques to support scalable pipelines for AI-driven beauty services

Contract Full-Stack Developer   New Westminster, BC
Hypatia Systems   *Jan 2021 – Present*
- Developed and launched a **Node.js** based web application for math education services; transitioned from full-time intern to contract developer, expanding features for virtual classrooms, teacher tools, and question creation.
- Implemented **automatic generation** of student report card and activity dashboard allowing teachers to easily monitor student performance identify areas of improvement

Machine Learning Researcher   Toronto, ON
BMO Lab for Creative Research in the Arts, Performance, Emerging Technologies and AI   *Sept 2024 – March 2025*
- Integrated state of the art motion imitation machine learning models with in house motion capture and display system to allow live motion analysis
- Conducted comprehensive **literature review** and experiments detailing the current state of the art for motion capture imitation in physics based simulations and **identified limitations** for use in inverse dynamics estimation

Programmer Analyst Intern   Vancouver, BC
UBC Digital Solutions   *Jan 2022 – Sept 2022*
- Automated the initialization of virtual machines for local development environments with shell scripts and increased on-boarding productivity **by 25%**
- Refactored legacy web applications with **React** and resolved security and reliability issues to ensure stable platforms for doctors and residents in the Faculty of Medicine

PROJECTS

Field Area Segmentation | *Python, PyTorch, OpenCV, Mask-RCNN*   May 2024 – Aug 2024
- Ranked 14 out of 64 teams as a 2 developer team in Solafune's competition for field area segmentation
- Trained and fine-tuned **Mask-RCNN** models on 12 band satellite images and improved final score **by 0.11** through data augmentation and slicing aided hyper inference

Twitter Reviews Topic Modeling | *Python, pandas, BERTopic, gensim*   Jan 2024 – Feb 2024
- Conducted analysis of Twitter Play Store reviews using **LDA and BERTopic** for a course project
- Discovered traces of company scandals and controversies just by analyzing user reviews

SKILLS

Machine Learning: Python, NumPy, PyTorch, pandas, scikit-learn, OpenCV
Web Development: Node.js, JavaScript, TypeScript, HTML, CSS
Databases: PostgreSQL, MSSQL, SQL