# Andy (Man Yeung) Tai

**Technical skills**: Programming: R, Python, SQL **Spoken Languages**: English, Cantonese, Mandarin

<u>andymytai@gmail.com</u> | (604) 319-3226 Tools/Frameworks: Git, Jupyter, Scikit-learn, Tidyverse, MongoDB

#### PROFESSIONAL WORK EXPERIENCE

University of British Columbia, Department of Data Science, Vancouver, BC, — Postdoctoral Fellow July 2024 - Present

- Mentored elite data science graduate students while teaching advanced courses in Probability, Databases, and Production Tooling
- Spearheaded cutting-edge ML projects with real-world datasets, pioneering innovative feature engineering techniques
- Architected reproducible Python/R/SQL workflows adopted by multiple research teams
- Created high-impact visualization dashboards by translating complex findings for non-technical stakeholders
- Currently authoring a definitive regression textbook while developing an AI-powered training system for technical onboarding

## **NAI Innovations,** Vancouver, BC, Canada — Data Scientist

April 2024 - Present

- Evaluated ML-driven startups through precision metrics directly informing investment decisions
- Transformed raw behavioral data into strategic growth opportunities through sophisticated pattern recognition
- Engineered enterprise-grade SQL databases and real-time performance dashboards driving executive decision-making
- Pioneered A/B testing frameworks that quantifiably improved product development outcomes
- Delivered data-driven presentations transforming complex findings into actionable executive strategies

## Concussion RX, Vancouver, BC, Canada — Data Scientist

Jan 2024 - August 2024

- Focused on enhancing diagnosis and treatment of concussions using advanced AI LLM tools
- Developed healthcare professional onboarding documents
- Employed machine learning and statistical modeling to analyze concussion subtypes
- Stratified concussion data based on demographic factors for improved treatment protocols

## *University of British Columbia, Vancouver, BC, Canada — Ph.D.*

**September 2019 - May 2024** 

- Led a research team and analyzed 600,000+ healthcare records, delivering robust statistical models with direct clinical applications
- Engineered machine learning algorithms, achieving 90% accuracy through optimized Random Forest and neural network implementations with advanced hyperparameter tuning
- Developed comprehensive data pipelines for automated feature extraction, preprocessing, and cross-platform model deployment
- Applied novel statistical methodologies to uncover previously unidentified patterns in complex healthcare datasets

#### OTHER WORK EXPERIENCE

**Sherpa,** Vancouver, BC, Canada — AI Solutions Developer

May 2024 - Jan 2025

- Developed innovative Blog Writer demo integrating Sherpa and LangChain technologies for automated content creation
- Engineered system to transform audio transcripts into polished blog posts using advanced LLM APIs
- Created extensive documentation and deployment guides to facilitate enterprise adoption of the technology

## Venture Founder C49 Program (Innovations UBC), Vancouver, BC, Canada — Mentor

Jan 2025 - April 2025

- Provided strategic guidance and mentorship to early-stage technology ventures in the Innovation UBC C49 Program
- Supported comprehensive business development planning with focus on sustainable growth strategies
- Assisted AI-focused startups in refining their value propositions and technical implementation roadmaps
- Facilitated connections between promising ventures and potential funding sources within the Vancouver tech ecosystem
- Mentored founders on balancing technical innovation with market-driven product development approaches

#### **EDUCATION**

University of British Columbia, Vancouver, BC, Canada — Ph.D. in Neuroscience

PhD at the University of British Columbia focusing on the intersection of technology and mental health

*University of Toronto, Toronto, ON, Canada — B.Sc. in Neuroscience* 

Major in Neuroscience, Minor in Environmental Science and Religion

#### **AWARDS & PUBLICATIONS**

**Published Researcher:** 12 publications. Cited by 207 scholarly works in the fields of Psychiatry, Machine Learning, Computer Science, Mental Health, and Clinical Decision Support Systems (<u>Google Scholar Profile</u>)

Mitacs Globalink Research Award (GRA) 30-Oct-2022 — 22-Jan-2023: For research abroad at the university of Sydney

UBC Master of Data Science Teacher's Assistant Award: Recognized for exceptional teaching assistance in graduate-level data science

President's Academic Excellence Initiative PhD Award: Awarded to recognize the significant contributions of PhD students

Research Day 2021 Lightning Talk & Poster People's Choice Award: Machine Learning to Understand Overdose.