



EDUCATION

MCMASTER UNIVERSITY PhD in Computer Science

AI, mechanistic interpretability

MCMASTER UNIVERSITY MAsc in Biomedical Engineering

AI, clinical decision support

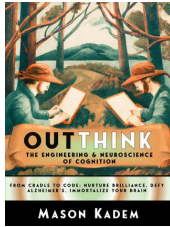
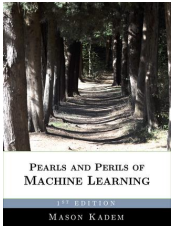
WESTERN UNIVERSITY MSc in Neuroscience

Signal processing, eye tracking

WESTERN UNIVERSITY HBSc in Psychology

Remote testing, HCI, attention

AUTHORED BOOKS



CERTIFICATION

UNIVERSITY OF OXFORD machine learning theory

WESTERN UNIVERSITY university learning

COMPUTE ONTARIO high-performance computing

JOURNAL ARTICLES

ResearchGate | Google Scholar

RESEARCH TALKS

AAAI Singapore 2023

AAAI Dubai 2025

IEEE AIoT, Japan, 2025

INVITED SPEAKER

AI Health Rounds, eHealth seminars, International AI venues (x2), Canadian Space Agency (x2), AI courses (x6), physiology, fluid mechanics, FHIR North

EXPERIENCE

MOHAWK COLLEGE | Professor of Computer Science

Dec 2022 – Dec 2025

• *profess CS, cybersecurity, and digital health courses; AI course development; capstone supervision; academic policy; industry partnerships; full-time since August 2024*

VASCULAR AI | Head of Data Science

July 2019 – Aug 2024 | Hamilton, ON

• *brain health, AI/ML leadership, data science management, commercialization*

RESEARCH ONLINE | Chief Technology Officer

May 2022 – Present | Dundas, ON

• *strategic tech leadership, biophotonics, stakeholder management, AI product development, ethics and compliance, administration, commercialization*

FANSHAWE COLLEGE | Professor of Machine Learning

July 2022 – Dec 2023

• *Developed AI/ML courses, taught cyber ML course*

VECTOR INSTITUTE | Consultant: Development + Coach

March 2023 – April 2023 | Toronto, ON

• *machine learning course development and teaching*

MCMASTER UNIVERSITY | Various Research & Software Roles

Sep 2019 – Nov 2022 | Hamilton, ON

• *neuroplasticity; multiscale hemodynamic modelling; medical imaging; surgery/interventions; software; multi-omics, biomarkers, explainable AI*

SELECTED AWARDS

2025 **1st Place**, McMaster Computing & Software Research Competition

2023 **CIHR PhD Award (\$120,000) + MITACS Entrepreneur (\$90,000)**

2022 **NSERC Vanier Nominee** (Federal Competition)

2021 **QEII-GSST (\$10,000) + E.M. Dalley Fellowship(\$5000)**

2016 **Varsity Athlete, Gold Medalist, Captain**

SELECTED SERVICE ACTIVITIES

Canadian Space Agency | **Invited Neuroscience Consultant**

JACC, MEDTEQ+ | **AI/Grant reviewer**

HSGSA + Jack Chambers PS | **President**

Thames Valley District School Board | **Judge & Speaker**

The Clinic | **Health Startup Mentor**

TEACHING

ML/DL, leadership, engineering design, modelling of bio signals, IP law, research methods, statistics, programming, web dev, change management, capstone, telehealth, medical devices, forensics, cyber infra, cyber ML

SKILLS

Technical ML/AI/statistics AI development mechanistic interpretability medical imaging signal processing brain networks hemodynamics IoT
Leadership commercialization curriculum development supervision stakeholder engagement human-AI interaction industry partnerships