Mason Kadem

mason.kadem@gmail.com | links | Dundas, ON, Canada

EDUCATION

MCMASTER UNIVERSITY

PhD IN COMPUTER SCIENCE

Faculty of Engineering Keywords: xAI, HCI

MASc in Biomedical Engineering

Faculty of Engineering Keywords: Interpretable ML, Decision-support

WESTERN UNIVERSITY

MSc in Neuroscience

Schulich Medicine and Dentistry Keywords: cognition, language, signal processing

HBSc in Psychology

Brain and Mind Institute Keywords: HCI, cognitive software, UI/UX

CERTIFICATES

COMPUTE ONTARIO

High-Performance Computing

WESTERN UNIVERSITY

University Teaching

UNIVERSITY OF OXFORD

Machine Learning Theory

BOOKS





PUBLICATIONS

ResearchGate | Google Scholar

Selected Conferences

Association for the Advancement of Artificial Intelligence, Singapore, 2023
Imaging Network Ontario, Canada, 2023

Teaching

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

Invited speaker

AI Health Rounds, eHealth seminars, physiology, biofluid mechanics systems, supervised ML, AI (internationalx2), CSA x2, FHIR North

EXPERIENCE

MOHAWK COLLEGE | PROFESSOR OF COMPUTER SCIENCE

Dec 2022 - Present

Keywords: Profess computer science, cyber security and digital health courses. Research straddles ML, spaceflight and brain blood flow.

VASCULARAI.CA | HEAD OF DATA SCIENCE

July 2019 - Present | Hamilton, ON

Keywords: brain health, AI/ML, data science, commercialization

RESEARCHONLINE.CA | CHIEF TECHNOLOGY OFFICER

May 2022 - Present | Dundas, ON

Keywords: large-scale physiological testing online, biophotonics, bioinstrumentation, Al, R&D, ethics, edge computing, security/compliance, funding, data engineering

FANSHAWE COLLEGE | Professor of Machine Learning

July 2022 - Dec 2023

Keywords: Developed AI/ML courses, taught cyber ML course

VECTOR INSTITUTE | Consultant: Development + Coach

March 2023 - April 2023 | Toronto, ON

Keywords: ML course development and teaching in Machine Learning program

MCMASTER UNIVERSITY | Various Research Roles

Sep 2019 - November 2022 | Hamilton, ON

Keywords: neuroplasticity, multiscale modelling, medical imaging, surgery/interventions, design thinking, rapid prototyping, managing software teams, medicine, multi-omics, biomarkers, ML

SELECTED SERVICE ACTIVITIES

Canadian Space Agency | Invited Neuroscience Consultant

JACC, MEDTEQ+ | AI REVIEWER

HSGSA, Jack Chambers PS | President

Thames Valley District School Board | JUDGE & SPEAKER

The Clinic | Health Startup Mentor

SELECTED AWARDS

2023 MITACS Accelerate Entrepreneur (\$90,000)

2023 CIHR CGS-D Doctoral Award (\$120,000)

2022 NSERC Vanier Nominee (Federal Competition)

2021 Queen Elizabeth II Scholarship in Science and Technology (\$10,000)

2021 E.M. Dalley Fellowship (\$5000)

2016 W.O.S.S.A Gold Medal (Captain)/ Varsity Wrestler

SKILLS

shell • python • R • matlab • C/C++ • fullstack • LTEX• ML/Al/stats • UX/UI

• mathematical modeling • devops • signal image processing • microcontrollers • remote health • cognition • wet lab •