MOHSEN SELSELEH

Citizen: Canadian
https://www.linkedin.com/in/mohsen-selseleh-phdca-66b098291• github.com/Mohsenselseleh,• selsele3@yorku.ca

SUMMARY

Economics researcher with graduate training in mathematics, statistics, and data science. My interests span econometrics, microeconomics, macroeconomics, development economics, financial risk, and machine learning. As a sessional lecturer and instructor, I have taught business analytics, statistical methods, and data programming. I bring quantitative research and teaching experience to questions in economics and finance.

RESEARCH INTERESTS

Econometrics • Financial Econometrics • Time-Series Forecasting • Data Science & Machine Learning in Economics & Finance • Causal Inference

EDUCATION

Master of Arts, Economics — York University, Toronto
Sep 2026 – Present

Master of Arts, Data Science — University of Guelph
Sep 2021 – Aug 2022

Coursework: Statistical Learning, Machine Learning for Sequences, Spatial-Temporal Data Analysis, Ethics of Data Science

Master of Arts, Mathematics & Statistics (Probability) — York University
Sep 2018 – May 2020

Coursework: Probability Theory, Mathematical Statistics, Time Series Analysis, Stochastic Processes, Stochastic Calculus in Finance, Numerical Methods in Finance, Data Mining

Honours Bachelor of Mathematics for Commerce(Actuarial Science) — York University, 2018

Honours Bachelor of Arts, Economics — York University
Sep 2023 – Apr 2025

Award: Department of Economics Undergraduate Award for Excellence (2026)

YorkU–LMU Virtual Exchange Program — York University – LMU Munich
Sep 2022 – Jan 2023

Certificate in Data Analytics, Big Data, and Predictive Analytics — Toronto Metropolitan University
Jan 2021 – Oct 2021

Doctor of Philosophy (PhD), Social Communication Science — Allameh Tabataba'i University, Tehran, Iran
Sep 2006 – Sep 2010

Focus: Content analysis methods

Master of Arts, Social Communication Science — Allameh Tabataba'i University, Tehran, Iran
Sep 2004 – Sep 2006

Focus: Survey Methods

Bachelor of Engineering in Civil Engineering — Razi University, Kermanshah, Iran
Graduated Oct 2001

WORKING PAPERS & PUBLICATIONS

- **A Regime-Switching Machine Learning Approach to Bitcoin Price Prediction with Twitter Sentiment** — SGH Warsaw School of Economics Workshop (2025)
- **Value at Risk, Expected Shortfall, and the Limits of Gaussian Assumptions** — CESG Conference, Vancouver (2026)
- **Monetary Policy Transmission Under Uncertainty** — Bank of Albania Research Workshop (2026)
- **The Econometric Pitfalls of Simplicity: Re-evaluating P/E and CAPE Ratios** — Risk Center, Toronto (2026)
- **Trade Shocks and Credit Risk in the Canadian Steel Sector** — Risk Center, Toronto (2025)
- **A Rigorous Path to Mechanistic Interpretability in Dynamical AI Systems** — IEOM North American Conference (2026)
- **Transition from a State-Controlled Economy to a Free-Market System: Poland and Lessons for Iran** — University of Sussex & ThinkTank of Iranian Affairs (2025)
- **Impact of Islamic-Iranian Identical Factor on Beautification of City** — Armanshahr Journal (2009)
- **Obstacles and Ways of Establishment of Electronic Cities in Iran** — Strategy for Culture (2009)
- **Addictive Use of Mobile Phones** — Iranian Journal of Sociology of Social Issues (2013)
- **The Comparison of Telegraph and Internet Roles in Development of Iran** — IAMCR Conference, Portugal (2009)

RESEARCH & PROFESSIONAL EXPERIENCE

Financial Risk Analyst Intern (Model Validation & Analytics) — Sun Life
2023

Financial Risk Analyst Intern — Risk Center, York University
2022

Data Analyst — Calian Group, Ottawa (Remote)
Jan 2021 – Apr 2021

TEACHING EXPERIENCE

Sessional Lecturer — Ontario Tech University
2026 (Fall & Winter)

- BUSI 1520U: Introduction to Business Analytics

Sessional Instructor — George Brown College
2025 – 2026

- BBUS 2000: Undergraduate Course
- BUS 4022 & BUS 4045: Graduate Courses

Teaching Assistant — York University
2023

- ECON 2500: Introductory Statistics for Economists

Teaching Assistant — University of Guelph
2021

- STAT 2060 · MATH 2130

Teaching Assistant & Math/Stat Lab Tutor — York University
2018 – 2019

University Lecturer — Allameh Tabataba'i University
2006 – 2011

- Undergraduate and graduate courses

Lecturer — UAST & Payame Noor University
2008 – 2010

PEER REVIEW & ACADEMIC SERVICE

- **Peer Reviewer — Data Science Track** — IEOM Society International (2025–Present) across Canada, India, Spain, USA, South Africa, and Bangladesh
- **Academic Mentor** — Risk and Insurance Studies Centre (RISC Foundation) (2026–Present)
- **Mentor** — Kaggle BIPOC Program (Cohort 4), 2024–2025
- **Data Science Mentor** — STEM Fellowship, 2022 & 2025
- **Data Scientist** — CHIRP, University of Manitoba,Jan 2015 – Apr 2015

HONOURS & AWARDS

- **Department of Economics Undergraduate Award for Excellence** — York University (2026)

TECHNICAL SKILLS & CERTIFICATIONS

Programming & Tools: Python, R, SAS, SQL, MATLAB, EViews, SPSS, Minitab, LaTeX, Git/GitHub, Cloud Basics, Hugging Face, FastAPI

Certifications:

- Econometrics & Statistical Modeling — Udemy
- Machine Learning & AI — Udemy
- Financial Economics & Risk Modeling — Udemy
- Programming & Data Science — Udemy
- Data Mining & Analytics — Udemy
- IBM Data Science Professional Certificate — Coursera
- Summer School on Sustainable Finance — European Commission
- Market Risk Management Strategies — Udemy
- AML & Terrorist Financing — Canadian Securities Institute
- AML & Fraud Administration — Seneca Polytechnic
- Machine Learning in Trading & Finance — Google Cloud
- Bloomberg Market Concepts — Bloomberg
- Courses about Azure, Google cloud— Coursera