Shayan Abbasi

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Profile

Econometrist and Data Scientist with a PhD in Quantitative Marketing from McMaster University and a Master of Financial Economics from the Barcelona School of Economics. Three years of experience in data analysis within the Finance and Marketing sectors, specializing in causal inference and data-driven strategy. Experienced in leveraging web scraping and text classification to build unique datasets for analysis. Research focuses on value appropriation, privacy policy, and the adoption of generative AI within the mobile app ecosystem. Technical toolkit includes advanced econometrics, experimental design, and large-scale data processing to derive actionable insights.

Technical Skills

Data Science: Web Scraping, Text Classification, Data Wrangling, Pipeline Management.

Econometrics: Natural Experiments, Difference-in-Differences, Synthetic Controls, Propensity Score Matching, Panel Data.

Competencies: Marketing Strategy, Platform Governance, Value Appropriation, Business Models.

Experience

Sessional Instructor — Sep 2025 – Jan 2026
DeGroote School of Business, McMaster University — *Hamilton, Canada*

- Designed and delivered the full curriculum for **Introduction to Marketing**, including tutorials and assessments for undergraduate students.

Data Scientist Research Assistant — April 2022 – Dec 2022
Shannon School of Business — *Sydney, NS*

- Executed **sentence classification** experiments using **Zero-Shot classification** (Bart, ModernBERT) and Gemini models with batching and sample packing.
- Architected data labeling using **semantic similarity** workflows to identify sentences aligned with abstract constructs, increasing model recall.
- Validated and curated high-fidelity datasets on **GCP (Vertex AI)**, streamlining model training for production-grade NLP applications.

Data Scientist — Jan 2024 – June 2025
United For Iran — *San Francisco, USA*

- Streamlined decision-making by building automated **dashboards** and reporting tools.
- Developed **dynamic map interfaces** using Plotly, GeoPandas, and NetworkX for high-resolution spatial analysis of agent activity.
- Implemented **anomaly detection** and behavioral clustering (K-Means, GMM) to identify systemic patterns in user behavior.
- Spearheaded reports on asset-level trends and **resource optimization** utilizing infrastructure diagnostics.

Data Research Assistant — Dec 2024 – Jan 2025
McMaster University — *Hamilton, Canada*

- Engineered **fuzzy matching** workflows for disparate datasets, streamlining data preparation for longitudinal research.

Quant Developer — Oct 2020 – Dec 2020
Quant Team — *Tehran, Iran*

- Automated large-scale data ingestion and cleaning for panel datasets to ensure data integrity.
- Developed **risk models** utilizing Sharpe ratio, VaR, and Drawdown metrics.
- Implemented automated high-frequency trading models using **arbitrage strategies**, Monte Carlo backtesting, and grid trading.

Education

Ph.D. Quantitative Marketing   Aug 2022 - March 2026
McMaster University   *Hamilton, Canada*

Three essays in mobile app ecosystem: Value appropriation and business models, platform owner entry and complementors' response, and conversational assistant (Gen AI) integration in mobile apps.

- Methods: DiD, Panel Data Regression, Zero-Shot Classification, Fine-tuned LLM for classification through GCP's Vertex AI custom model.

Advisor: Dr. Manish Kraker

Master of Applied Economics   Sep 2021 - Jul 2022
Autonomous University of Barcelona   *Barcelona, Spain*

Master Thesis: Market Share Analysis in U.S. Markets.

Master of Financial Economics   Sep 2020 - Jul 2021
Barcelona School of Economics   *Barcelona, Spain*

Master Thesis: The financial consequences of corporate misconduct: A financial event study analysis.

Bachelor of Economics   Sep 2016 - Jul 2020
University of Tehran   *Tehran, Iran*

- Graduated with distinction
- Minor: Computer Science

Skills

Quant & Econometrics: Causal Inference (Diff-in-Diff, Matching, RDD, IV), Statistical Testing, A/B Testing.

AI / NLP: Prompt Engineering (RAG, Variable injection, Batching, sample packing, etc.), Text Mining, Semantic Similarity.

Machine Learning: Scikit-learn, TensorFlow, XGBoost, Predictive Modeling.

Data Engineering & Processing: Python, R, SQL, Stata, PySpark, Pandas, NumPy, SciPy, Data.table, Tidyverse.

Cloud / DevOps: GCP (Compute Engine VM, Vertex AI), Git, Docker.

Web / Extraction: Web Scraping (Selenium, BeautifulSoup), Regex.

Conferences And Publications

Theory and Practice of Marketing (TPM) Conference, Austin, TX - Presented 2024

DeGroote Marketing Brown Bag Lunch (BBL) Seminar, Hamilton, ON - Presented 2024.

AMS Conference and Doctoral Symposium, Montreal, QC - Attendance 2025.

ET Symposium for Canadian Marketing Strategy, University of Guelph, ON - Attendance 2025.

Canadian Conference for Business Research Students (CCBRS): AI Horizons: Shaping the Future of Business Research Collaboration., Hamilton, ON - Presented poster 2025

Honors and Awards

DeGroote Distinguished Student Award; $7,500 (2022–2025).

Ph.D. Office (DSB) Scholarship, McMaster University — $45,000 (2022–2025).

DeGroote Supervisor Student Support; $10,300 (2022–2025).

University of Tehran; Hami Scholorship for Distinguished Students (2019-2020).