Damanveer Singh Dhaliwal

Toronto, ON   damandhaliwal1910@gmail.com   +1-604-700-5498   damandhaliwal.me
damanveerdhaliwal   damandhaliwal

Education

University of Toronto *Aug 2025 – May 2026*
MA in Economics, Research Emphasis

- **Graduate Coursework:** Microeconomic Theory, Macroeconomic Theory, Econometrics, Causal Machine Learning, Quantitative Macroeconomics, Empircal Applications of Economic Theory

University of British Columbia *Sep 2017 – May 2022*
Bachelor of Commerce (Honours), Finance

- **Coursework:** Corporate Finance, Investment Theory, Government and Business, Game Theory, Linear Algebra, Calculus I - IV, Probability, Stochastic Processes.
- **GPA:** 83%

Research Experience

Research Replicator *Chicago, IL*
Journal of Political Economy, University of Chicago *Jul 2025 – Present*

- Responsible for validating empirical research across STATA, Julia, R, and Python for publication by reproducing econometric analyses and machine learning pipelines, ensuring reproducibility at a top-5 economics journal.
- Conducting statistical verification of causal inference methods (e.g., IV, DiD, panel regressions), detecting inconsistencies between the results presented in the paper and code, ensuring robustness of published findings.
- Collaborating with the Data Editor to build internal workflows for reproducibility checks, standardizing best practices in version control, and replication reporting, strengthening transparency and credibility of published research.

Research Assistant *Paris, France*
Sciences Po, Department of Economics *Jan 2024 – Dec 2024*

- Engineered an R-based analytics pipeline integrating real-time transit API data to evaluate bus route efficiency in London's public transport network, enabling large-scale performance benchmarking.
- Maintained and debugged a custom R package, ensuring replicability of results and reliability of econometric analysis for the research team.
- Automated production of tables and visualizations (Tinytable, ggplot2, kableExtra + LaTeX), streamlining the workflow for peer-review ready publication outputs.

Research Assistant *Vancouver, BC*
University of British Columbia, Sauder School of Business *Jul 2020 – Jan 2022*

- Modeled credit risk transfer securities (STACR) issued by Freddie Mac, building heterogeneous agent simulations to estimate losses for private investors and benchmark predictions against observed market data.
- Processed and analyzed the U.S. Loan-Level Dataset to model default rates and loss given default, supporting the design of a Canadian Credit Risk Transfer program.
- Extracted and integrated geospatial elevation data (Raster + GDAL, ~30GB DEM dataset) from the US Geological Survey, establishing a comprehensive 75 km radius around major cities to enhance spatial context for subsequent analyses.
- Applied Geopandas, Shapely, and Rasterstats to perform geospatial analysis on elevation data in conjunction with land cover information, investigating changes in land use and housing pricing.

Research Assistant *Vancouver, BC*
University of British Columbia, Sauder School of Business *Feb 2019 – Apr 2019*

- Investigated public companies in the US that went private over the last 20 years to discover what conditions and environments led to the company going private.
- Analyzed the different types of initiators and buyers in these transactions where companies went private.
- Identified patterns concerning the motivations of the initiators and the buyers behind the transactions by going through the SEC filings as well as sources from the news.

Professional Experience

Teaching Assistant - Introduction to Econometrics *Toronto, ON*
University of Toronto, Department of Economics *Sep 2025 – Present*

- Graduate-level teaching assistant for undergraduate econometrics course with 150+ students, supporting course delivery, grading and student engagement.

Senior Financial Analyst *Vancouver, BC*
Chard *Jun 2022 – Jul 2025*

- Built and optimized financial and econometric models to underwrite 100+ property acquisitions and redevelopment scenarios, supporting investment decisions on portfolios exceeding $1.0B.
- Led analytics and strategy on three landmark projects totaling $900M+, including a $350M public–private partnership and a $600M downtown Vancouver redevelopment.
- Designed and deployed a Python web-scraping pipeline (BeautifulSoup + GPT API) to monitor competitor rezoning and development activity, generating structured market intelligence from unstructured municipal filings.
- Drafted and delivered data-driven pitch materials that supported successful fundraising of $600M+ from institutional investors, pension funds, and Big 5 banks.

Teaching Assistant - Advanced Topics in Corporate Finance *Vancouver, BC*
University of British Columbia, Sauder School of Business *Sep 2021 – Dec 2021*

- Teaching assistant for a senior undergraduate corporate finance research focussed course with 20 students, supporting course delivery, ideation, and student engagement.

Equity Research Intern *Vancouver, BC*
Canalyst (now AlphaSense) *May 2019 – Aug 2019*

- Audited and analyzed financial models for public companies with a market cap of less than $2 billion.
- Updated and refined REITs, Financials, Healthcare, and Resources financial models to include financial information released in the latest earnings release by public companies in the U.S and Canada.
- Maximized accuracy and efficiency by drawing data directly from SEC/Sedar filings or Investor Relations webpages.
- Created new financial models for companies in the Materials and Energy sectors, which included analyzing and identifying their business operations as well as key drivers and future plans for the company

Research Projects

- The Role of Social Capital in Business Performance: An Empirical Analysis
- Viral Voting: An Information Diffusion Model of Social Pressure and Voter Turnout.
- Reinforcement Learning for Optimal Algorithmic Options Hedging.

Projects

PyFixest: Python Package for Fixed Effects Regression (Contributor) *github.com/pyfixest*

- Implemented configurable iteration limits in the demeaning algorithm, improving computational efficiency and user control for large-scale panel regressions.
- Developed support for heteroskedasticity-and autocorrelation-consistent (HAC) standard errors, including Newey–West and Driscoll–Kraay estimators, bridging econometrics theory with production-grade code.

Automated Market Data Collection System *github.com/marketdata*

- Engineered an automated apartment hunting system using TypeScript and Stagehand browser automation, intelligently extracting and structuring rental data (pricing, floor plans, availability) from multiple property listings into CSV format for systematic analysis.
- Integrated AI-driven web extraction with configurable LLM support (Gemini, GPT-4o, Claude), enabling cost-effective deployment using Google's free-tier API while maintaining production-grade data collection capabilities.

Awards & Certifications

- **Dean's Honour List**, UBC Sauder School of Business (2018, 2019, 2020, 2021)
- **Hugh M Brock Education Abroad Scholarship** (2020) - Awarded to support outstanding UBC students studying abroad.
- **UBC International Leader of Tomorrow Award** (2017 - 2022) - Full tuition and living allowance scholarship awarded to international students demonstrating superior academic achievement, leadership skills, and involvement in student affairs and community service.
- **Bloomberg Market Concepts (BMC) Certification** (2021)

Technologies

Languages: Python, R, STATA, SQL, Julia, MATLAB, OCaml, TypeScript.

Technologies: Git, Azure, Docker.