

Bret Allinott

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Education

- **Master of Arts, *Economics***

University of Alberta (Edmonton, AB)

September 2021 – June 2022

- **Bachelor of Arts, *Honours Economics (GPA: 3.9)***

University of Alberta (Edmonton, AB)

September 2018 - April 2021

Achievements

- Emerson and Tang Family Scholarship (University of Alberta, 2020)
 - *Awarded to a student with superior academic achievement entering any year of study for a Bachelor of Arts with a major or minor in Economics. Selection based on academic achievement in courses taken in Economics and demonstrated involvement in sports. Preference given to a student from rural Alberta.*
- KD Verville Scholarship for Excellence in Honors Economics (University of Alberta, 2020)
 - *Award presented for high academic achievement in the Honors Economics program, with special focus to student leaders who actively participate in Canadian democracy.*
- Gwendolyn Ewan Scholarship (University of Alberta, 2019)
 - *Presented to the student from the Northwest Territories with the highest GPA at the University of Alberta.*
- Deans Honours List (University of Alberta, 2019, 2020 & 2021)
 - *Presented to students possessing a 3.5 GPA or better on a full-time course load.*
- Economics Honors Awards (University of Alberta, 2018 & 2019 & 2020)
 - *Awarded to students with satisfactory academic standing enrolled in the second, third or fourth year of an undergraduate degree in Honors Economics in the Faculty of Arts. Selection based on academic standing. Part time students can be considered for this award.*
- Minister's award for academic excellence (Diamond Jenness Secondary School)

- *Award presented for high academic achievement, as well as leadership, dedication, and commitment to the school community.*
- Bronze governor generals academic medal (Diamond Jenness Secondary School)
 - *Award presented to the student with the highest average in a graduating class*

Non-Published Research

Determinants of Aggregate Investment: Comparing Approaches

- Compared a traditional static equation for determining investment, to a variety of more advanced time series methods (ARIMA, VAR, GARCH)
- Used each model to create forecasts of investment and employed statistical tests to compare the predictive power of each model to one another
- This was written as a final paper for ECON 509 – Time Series Econometrics

Price Effect of a Gasoline Cartel

- Calculated the effect on price of a retail gasoline cartel in Ontario
- Employed a variety of forecasting and econometric methods to isolate the effect of collusion on prices
- This was written as a paper for ECON 699 – Advanced Competition Policy

An Empirical Analysis of a Two-Wage Monocentric City Model in Edmonton

- Used housing assessment data in Edmonton I analyze housing location decisions of two groups, rich and poor.
- Specifically, how location decisions change for each group after an income shock.
- This was written as a final paper for ECON 462 – Urban Economics.

Experience

Business Analyst (Urban Planning & Economy) – City of Edmonton – *May to Sept. 2021*

- Presented models and analysis to senior leadership.
- Utilized machine learning for model selection in time series forecasting models.
- Coordinated with multiple branches to ensure cohesive implementation of city plans.
- Quantified the positive effect to business owners and developers of the city's red tape reduction.
- Created an efficient workflow to forecast external variables of interest.

Graduate Teaching Assistant (Economics) – University of Alberta – *Sept. 2021 to June 2022*

- Held office hours and evaluated students for intermediate microeconomic and macroeconomic courses (ECON 281 & ECON 282)
- Improved upon adaptability, as each student had different needs.
- Employed consistency and attention to detail in student evaluation.

Citizenship Assistant (IRCC) – Government of Canada – *June 2019 to Dec. 2020*

- Interacted directly with the public during citizenship tests and ceremonies.
- Assisted in creating an efficient workflow for Citizenship Officers.
- Worked on self-directed projects.
- Learned to make decisions on problems that deviated from standard procedure.

Projects

Logit Forecast of Stock Prices

- Constructed a Logit model to forecast whether Microsoft stock price would increase or decrease the next day.
- Used direct forecasting to obtain a probability that stock price increases.
- Used cross validation to obtain the optimal number of lags in the model.
- Employed bootstrapping to obtain a prediction interval around my estimate.

ARIMA Forecast of Canadian GDP

- Constructed a basic ARMA model to forecast Canadian GDP to the end of 2021.
- Used R for data manipulation and selection of the optimal ARMA model. Statistical tests for stationarity and serial correlation were also conducted.

Skills

- Advanced knowledge of LaTeX and R.
 - Extensive experience with machine learning methods and time series analysis in R
- Familiarity with Python, Stata, SQL, and Tableau.
 - Certificate attained for SQL
- Extensive knowledge of the google suite such as google docs, google sheets, and others.