

# Matthew Senick

XXX-XXX-XXXX | matthewsenick.com | senick.matthew@gmail.com

## EDUCATION

### University of Toronto

Aug 2021 - May 2022

*Masters of Economics*

*Toronto, ON*

- cGPA: 3.59
- Relevant Coursework: Economic Applications of Machine Learning (A+), Statistical Methods for Machine Learning and Data Mining (A), Econometrics (A-)

### University of Saskatchewan

Sept 2017 - May 2021

*Double Honours Bachelor in Computer Science and Economics*

*Saskatoon, SK*

- cGPA: 3.87
- Awards: Lewis C. Gray Prize in Economics, Popoff Scholarship in Economics, Dean's Honour List, University of Saskatchewan Continuing Scholarship, NSERC Undergraduate Research Award, Greystone Entrance Award
- Relevant Coursework: Deep Learning (89%), Machines & Algorithms (94%), Simulation Principles (91%)

## EXPERIENCE

### Research Assistant (Economics)

Dec 2021 - May 2022

*University of Toronto*

*Toronto, ON*

- Built supervised and unsupervised web-scraping NLP models to quantify amenity preference sentiment amongst labour force actors (presented at ASSA 2022)
- Cleaned and prepared a multitude of research datasets for ongoing labour economics research

### Teaching Assistant (Economics)

Aug 2021 - May 2022

*University of Toronto*

*Toronto, ON*

- Led students in "Data Tools for Economists" and "Introduction to Data Analysis and Applied Econometrics"
- Obtained a 96% satisfaction rate in tutorial sessions for students learning data manipulation/analysis techniques

### Development and Database Manager (BI and Automation)

May - Sep 2020, May - Aug 2021

*Affinity Credit Union*

*Saskatoon, SK*

- Led a project to clean up reporting server standards and create tangible reports regarding data server usage
- Enhanced membership gain and loss reports aiding in back-office analysis and improved front-line efficiency
- Constructed internal reports and developed ETL pipelines for a variety of financial sector use cases

### Intern Market Analyst (Member Experience)

Jan - Apr 2020

*Affinity Credit Union*

*Saskatoon, SK*

- Built a decision tree model to learn from consumer product tendencies based on collected biographic data points
- Utilized qualitative research techniques to predict market outcomes for financial products and digital advice tools

### Research Assistant (Computer Science)

May - Sep 2019

*University of Saskatchewan*

*Saskatoon, SK*

- Aided in implementing and testing machine learning solutions for 'semantic code clone' detection research
- Prepared, manipulated, and managed extensive databases to be fed to machine learning and analytic algorithms

## ACADEMIC PAPERS

### University of Toronto

*Bearish or Bullish? A Predictive Sentiment-Weighted Attention Analysis of the Wall Street Journal*

- Web-scraped, cleaned, and tokenized a novel dataset of nearly 100,000 Wall Street Journal articles
- Constructed an LDA model to build time-series topic attention weighted by the RoBERTa sentiment transformer
- Applied Lasso regression to indicate the most informative topics over time and predicted market index fluctuations

## TECHNICAL SKILLS

**Skills:** Machine Learning, NLP, Web Scraping, Econometric Analysis, Research Techniques

**Programming Languages:** Python, SQL, R, Stata, C, Java, Scala, Visual Basic, JavaScript, C++

**Libraries:** TensorFlow, Scikit-learn, Pytorch, Pandas, Selenium, Gensim, NLTK

**Programs:** Anylogic, Weka, SSMS/SSRS/SSIS, Jupyter, Git

**Hobbies:** Golf, Hockey, Chess, Freelance Web-Development