

# Simon Raymond

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[Personal Website](#)

[Github](#)

## Education

- **Saint Mary's University (SMU)**, Halifax, NS
- **Bachelor of Commerce, Honours Economics** | *Expected Graduation: May 2025*
- **Overall GPA:** 4.21/4.30
- **Notable Coursework**
  - *Intermediate Economic Stats* (ECON 3303, A-)
  - *Mathematical Economics* (ECON 3302, A+)
  - *Money and Banking* (ECON 3307, A+)
  - *Labour Economics* (ECON 3341, A+)
  - *Machine Learning and Artificial Intelligence* (ECON 3838, A+)
  - *Advanced Microeconomics* (ECON 4400, A+)
  - *Advanced Macroeconomics* (ECON 4401, A+)
  - *Econometrics* (ECON 4403, A+)
  - *Research Seminar* (ECON 4498, A+)
  - *Honours Thesis* (ECON 4499, A+)
  - *Special Topics in Microeconomics* (ECON 4404, A+)
- **University of Waterloo**, Waterloo, ON
- **Masters of Economics (MRP)** | *Beginning September 2025*
- **Scholarship Value:** ~\$30,000, including three Teaching Assistant positions

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## Professional Experience

- **Data Analytics Intern** | Nova Storm | *9 Months*  
Worked as an intern at Nova Storm (<https://novastorms.com/>), contributing to data analytics projects and software development initiatives. Involved in developing AI-driven business applications that improve access to information and support informed decision-making for communities.
- **Data Engineering Analyst** | Craft Alliance Atlantic Association | *2025*  
Conducted data engineering work for the Atlantic Canada Small Scale Manufacturers Sector Survey, converting raw survey data into clean, analysis-ready datasets. I also provided statistical analysis and advanced modeling support for our research team.

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## Research Projects

- **Honours Thesis (Completed):** *"Fourth Downs Decoded: A Predictive and Causal Analysis of Player Impact and Decision Making in the NFL"*
  - **Dates:** Fall 2024 – Winter 2025
  - **Supervisor:** Dr. Nicholas Manuel
  - **Application Development:** Created an interactive shinyapp application called NFL 4th Down Analysis (2016-2023)(Contact for access) to allow viewing and insights into NFL play by play data merged with weekly NFL data.
  - **Methodology:** Implemented a form of the Heckman Correction to enable causal analysis on factors with predictive power affecting 4th down results, combining econometric and machine learning tools with high-dimensional data.
- **Current Research:**
  - **Crowd Effects Study:** Investigating the influence of crowd behavior on coaches' decision-making in the NFL
  - **Poker Risk Aversion Analysis:** Developing a bucketing system of simplified game theory optimal (GTO) strategies to analyze risk aversion in poker

## Teaching Experience

- **Winter 2024:** Appointment to teach lab session:
    - *Machine Learning and Artificial Intelligence* (MBAN-5560-2 at SMU). In this lab I used R to teach students about how to understand machine learning algorithms and concepts. I taught students how to write algorithms with tools such as XGBoost or Random Forest. Students also learned how to truly understand what is happening inside these functions as we showed them how to write non-parametric models from scratch.
  - **Winter 2025:** Appointment to teach lab session:
    - *Machine Learning and Artificial Intelligence* (MBAN-5560-2 at SMU). These labs will be taught similarly to previous years labs. However, it will be taught with the Python programming language.
  - **Fall 2025:** Appointment to teach lab session:
    - *Econometric Analysis 2* (ECON 323 at UofW). This lab is taught both on a whiteboard and in R. Sessions are weekly for approximately 80 students in which we apply methodologies that were discussed in class.
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## Presentations & Speaking Engagements

- **Speaker** | [“Demystifying AI: Beyond the code”](#) | Saint Mary’s University  
Presented at this event hosted by Dr. Yigit Aydede at SMU, sharing insights on artificial intelligence applications and implications. Featured in SMU news for presenting to high school students participating in the Youth Business Analytics & AI Co-op Program.
  - **Radio Guest** | CBC Mainstreet NS | May 1, 2025  
Spoke with CBC Radio about agentic AI at the Atlantic AI Summit. The interview aired on Mainstreet NS in the afternoon. [Link to program](#)
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## Grading Experience

- **Past Appointment (Fall 2024):**
    - *Human Resource Economics* (ECON 3340) with Dr. Nicholas Manuel. This course had 40 students registered in it. My task was to grade assignments and provide feedback to students.
  - **Past Appointment (Winter 2025):**
    - *Machine Learning and Artificial Intelligence* (MBAN-5560-2) with Dr. Yigit Aydede. I will be marking the assignments and final projects of students.
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## Research Assistant Experience

- **1st Project:** [Nova Scotia Neighborhood Housing app](#): an application that helps residents explore detailed neighborhood demographics, aiding decision-making and community development planning.
  - **2nd Project:** [Nova Scotia Crime Dashboard app](#): a deployed public tool that provides Halifax residents with interactive crime data, fostering awareness and supporting community safety initiatives.
  - **3rd Project:** [Nova Scotia Housing Wizard](#): a dashboard that allows buyers, sellers, and agents to analyze historical housing trends with agentic AI capabilities.
  - **Projects’ Leader:** Dr. Yigit Aydede
  - **Job Title:** Data Analyst & Deployment assistant
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## Awards and Scholarships

- **University of Waterloo Graduate Scholarship:** Awarded a scholarship valued at approximately \$30,000 for graduate studies beginning September 2025, including two Teaching Assistant positions and potential lab teaching opportunities.
  - **SMU’s Renewable Entrance Scholarship:** Maintained an academic scholarship for four years at SMU.
  - **SMU’s Renewable Entrance Scholarship Achievement:** Received an increase in scholarship amount in second year of university due to academic success.
  - **J.D. Shatford Memorial Trust Scholarship:** Received this merit-based scholarship during first two years of university until relocating closer to Halifax.
  - **Dean’s List Recognition:** Placed on the Sobey’s School of Business Dean’s List from 2022-2023.
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## Other Work Experience & Extra-curricular Activities

- **Grocery Stocker:** | Bell's Independent Grocer | 2016-2023 This employment was from when I was age 13 through high school and university. I worked part-time (under 20 hours/week) up until I turned 15. Afterwards I worked (30-40 hours/week).
  - **Cashier's Assistant:** | Costco | 2023-2024 This job includes helping customers bag their groceries and working as a cashier when needed. I currently work 30-40 hours/week during academic breaks (e.g. reading weeks, Christmas, summer).
  - **CCO:** Catholic Christian Outreach (CCO) is a student led club on campuses across Canada. At SMU I have taken five faith studies with CCO. In my second year of studies I was a part of the student-lead executive while leading a faith study.
  - **4-H:** 4-H is a youth development organization that empowers young people through hands-on learning experiences in agriculture, science, leadership, and life skills. I have taken the beef, sheep, poultry, exploring 4-H, and great outdoors projects.
  - **HCC Household program:** Holy Cross Chaplaincy (HCC) is a faith based organization that has physical chaplaincies on university campuses across Canada. I am a participant of this program as I live in the "St. Jerome House". This program helps young adults be in a living situation that promotes growth in our community.
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## References

- **Professor Yigit Aydede**  
*Chair, Department of Economics*  
*Sobey School of Business, Saint Mary's University*  
Contact: yigit.aydede@smu.ca
  - **Professor Nicholas Manuel**  
*Assistant Professor, Department of Economics*  
*Sobey School of Business, Saint Mary's University*  
Contact: nicholas.manuel@smu.ca
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## Links

These are provided in the case that a institution's software prevents clicking on a link in the document.

- **Personal Website:** (<https://simonraymond2003.github.io/SimonRaymond/>)
- **Github:** (<https://github.com/SimonRaymond2003/>)
- **Honours Research Proposal:** (<https://library2.smu.ca/handle/01/32122>)
- **NFL 4th Down Analysis (2016-2023):** (Link temporarily unavailable to the public. Please contact me for access.)
- **Nova Storm:** (<https://novastorms.com/>)
- **SMU News Article - AI Co-op Program:** (<https://news.smu.ca/news/2025/4/29/halifax-high-schoolers-gain-skills-in-ai-at-smu>)