Simon Raymond

Email: simon.raymond@smu.ca
Phone: (902) 999-1499
Personal Website
Github

Education
- **Saint Mary's University (SMU)**, Halifax, NS
- **Bachelor of Commerce, Honours Economics** | *Expected Graduation: May 2025*
- **Overall GPA:** 4.20/4.30
- **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, IP)
  - *Special Topics in Microeconomics* (ECON 4404, IP)

Honours Research Project
- **Title:** *"A Predictive and Causal Analysis of Contributing Factors for 4th Down Attempt Conversions in the NFL"*
- **Dates:** Fall 2024 – Winter 2025 semesters
- **Supervisor:** Dr. Nicholas Manuel
- **Application Development:** Created a interactive shinyapp application called NFL 4th Down Analysis (2016-2023) to allow viewing and insights into NFL play by play data that is merged with weekly NFL data.
- **Honours Project Description** We are implementing a form of the Heckman Correction to be able to use causal analysis on factors that have predictive power as well as a effect on 4th down results. There is a heavy focus on using both econometric and machine learning tools in conjunction with high dimensional data.

Teaching Experience
- **Winter 2024:** Past appointments to teach lab sessions:

  - *Machine Learning and Artificial Intelligence* (MBAN-5560-2). 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:** Future appointments to teach lab sessions:

  - *Machine Learning and Artificial Intelligence* (MBAN-5560-2). These labs will be taught similarly to previous years labs. However will be taught with the Python Programming language.
  - *Econometrics* (ECON-4403/5603). This lab will be taught mostly on a whiteboard with linear algebra to help students add depth to their knowledge of Econometrics. Some practical examples will also be demonstrated with either R or Python.

Grading Experiance

- **Past Appointments (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.

- **Planned Appointments (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.
    - *Econometrics* (ECON-4403/5603) with Dr. Yigit Aydede. Besides teaching this class's labs, This role will have me marking assignments, along with midterms and exams.

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.
- **Projects' Leader:** Dr. Yigit Aydede
- **Job Title:** Data Analyst & Deployment assistant

Awards

- **SMU's Renewable Enterance Scholarship:** I have maintained a academic scholarship for the past 4 years at SMU.

- **SMU's Renewable Enterance Scholarship Achievement:** Due to my academic success I recieved a increase in my scholarship amount in my second year of university.

- **J.D. Shatford Memorial Trust Scholarship:** This merit based scholarship is awarded to students who live geographical trust area. I received this scholarship in my first two years of university until I moved closer to the city of Halifax.

- **Dean's List Recognition:** Saint Mary's University recognizes students of high academic standing by placing them on the Dean's List. I have been placed on the Sobey's School of Business Dean's List from 2022 - 2023.

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 Houshold 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.

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

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://simonraymond2003.github.io/ProposalPage/)
- **NFL 4th Down Analysis (2016-2023):** (https://jzmtko-yigit-aydede.shinyapps.io/NFL_4th_Down_App/)
- **Nova Scotia Neighborhood Housing app:** (https://hood.novastorms.com/)
- **Nova Scotia Crime Dashboard app:** (https://safe.novastorms.com/)