

Yigit Aydede

Curriculum Vitae ([Yigit_Aydede](#))

Professor of Economics, Saint Mary's University, Halifax, Canada.

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Highlights

I am a professor in the Department of Economics at [Saint Mary's University](#) in beautiful Halifax. Although most of my research is in the field of population economics, my current focus is on genomics, unconventional data, chronic disease surveillance systems, and machine learning. I teach data analytics courses at undergraduate and graduate levels. This Github page summarizes all my work including a draft version of my book, [Tool Box](#), my recent published articles, blogs about “anything useful”, and teaching.

- Starting July 1 in 2021, I am appointed to [Sobey Professorship in Economics](#) for 5 years.
- I just finished my one year term as a visiting professor at Free University of Bozen - Bolzano ([UniBZ](#)).
- I am a founder member of [Research Portal on Machine Learning for Social and Health Policies](#), where, in collaboration with one of my colleagues, we organize scientific events. I have organized a 3-day online [Summer School](#), **Machine Learning for Economists and Applied Social Scientists**, followed by a 2-day [Webinar](#) series. More than 60 faculty and researchers attended these fee-based online lectures and more than 260 participants registered for the 2-day long webinar in 2020.
- We just finished (24-25 August 2022) our [1st Workshop of Applied Microeconomics](#).
- As many other researchers, I've also worked on COVID-19. I've just finished a project (as a PI) selected to the [Nova Scotia COVID19 Research Coalition](#). I've also served at [Reimagining the Future for Nova Scotians](#) where academic and community experts are put together to see what opportunities are possible for Nova Scotia after the pandemic.
- I have been teaching a course, [Introduction to Applied Machine Learning with R](#) since Winter 2020. It is the first and only machine learning course in the [Sobey School of Business](#) that also has programming Labs. Moreover, I will also be teaching “MBAN 5610 Artificial Intelligence & Machine Learning” at the new Master of Business Analytics ([MBAN](#)) program in March 2023.
- I present and disseminate my work using unconventional data and the latest methods in Machine Learning here in my blog post series. (See CBC NEWS - [How well have Canadians complied with COVID-19 restrictions? New data offers a glimpse](#))

Education

- PhD in Economics, University of Delaware, USA, 2006.

Scholarship

Book

The first and incomplete draft of my book is available in my Github repo: [Tool Box for Social Scientists and Policy Analysts: Applied Data Analytics & Machine Learning with R](#). The final version is forthcoming in December 2022.

Refereed Publications

Google Scholar

- Speeding up for a son in Turkey. *Canadian Journal of Development Studies*. Forthcoming.
- Speeding Up for a Son among Immigrants in Canada. *Population Research and Policy Review* May 2022.
- Why does education-specific skill mismatch have no effect on wages in Turkish labor markets? *Applied Economics*. (B.Orbay and N.Erkol). December 2021 (53) 58.
- Assortative Preferences in Choice of Major. *IZA Journal of Labor Economics*. October 2020: 9:1.
- Asymmetric Information and Discount to Foreign-Acquired Education in Canada (Atul Dar). *IZA Journal of Development and Migration*. 2019, 10:2.
- Immigration and Location Choices of Native-Born Workers in Canada. *Papers in Regional Science*. Vol.96(S1) March 2017. 96-S1.
- Is the Lower Return to Immigrants' Foreign Schooling a Postarrival Problem in Canada? (A. Dar). *IZA Journal of Migration*. 2017. 6:4.
- The Cost of Immigrants' Occupational Mismatch and the Effectiveness of Postarrival Policies in Canada. (A. Dar). *IZA Journal of Migration*. 2016. 5:9.
- Re-employment, Housing Tenure, and Squatter Settlements in Turkey: An Empirical Analysis. *Housing, Theory and Society*. 2016. Vol.33(1).
- Comparison of Economic Benefits of University and Vocational High School Education among Different Majors in Turkey. (B. Orbay) *European Journal of Higher Education*. 2016. Vol.6(2).
- Economic Benefits of Studying Economics in Canada: A Comparison of Wages of Economics Majors with those in Other Disciplines Circa 2005. (A. Akbari) *Canadian Journal of Higher Education*. 2015. Vol.45(4).
- Effects of Immigration on Interregional Population Flows in Canada. *Migration and Development*. 2014. Vol. 3(2).
- Spatial Regularities between Nonimmigrant and Immigrant Numbers in Canada. *Migration Letters*. 2014. Vol.11(1).
- Are the Educational Credentials of Immigrant and Native-Born Workers Perfect Substitutes in Canadian Labour Markets? A Production Function Analysis. (A. Akbari). *Education Economics*. 2013. V.21(5).
- Effects of Immigration on House Prices in Canada. (A. Akbari). *Applied Economics*. 2012. Vol.44(13).
- Parametric Social Security Reforms and Saving: Evidence from Turkey. *Topics in Middle Eastern and Northern African Economies*, September 2011, Vol.13.
- Expected Social Security Wealth Simulations and Implicit Rate of Return Calculation for the Turkish PAYG System. *Journal of Economic and Social Measurement*. 2010. Vol.35.
- Generational Selfishness and Social Security: A Note on a Time-Inconsistency Problem in Parametric Reforms of PAYG. *Journal of Economic Policy Reform*. 2010. Vol.13(1).
- Aggregate Consumption Function and Public Social Security: The First Time-Series Study for a Developing Country, Turkey. *Applied Economics*. 2008. Vol.40(14).

Papers Under Review

- Native-born-immigrant wage gaps in Canada: Market imperfections or differences in human capital endowments? *Applied Economics*. (Atul Dar)

Work-in-progress

- Application of “dominance analysis” with health data: Identifying regional spreaders of a viral pathogen and their socio-spatial predictors in Nova Scotia. (with Jan Ditzen)
- Understanding the dynamics of a viral spread by sparse composite likelihood selection.
- [Mobility and COVID-19 Spread: Solving the Puzzle](#) (Mutlu Yuksel).
- Predicting Bankruptcy by Using New Textual Features in Financial Statements (N. Kochetova, A. Boshanna).
- Predicting Respiratory Diseases by Social Media Extraction and Machine Learning (with MLportal).

- [Predicting Cancer by Using CCHS \(with MLportal\)](#) – SSHRC/RDC application is accepted.
- Predicting immigrants’ hospital utilization based on the record of landing and tax data for pre-migration policies (Mutlu Yuksel, Mevlude Akbulut, Casey Warman).

Working Papers

- Dynamics of Social Mobility during the COVID19 Pandemic in Canada, (M.Yuksel and F.Begolli). *IZA Discussion Papers*, 13376. 06/2020.
- How Big is It? The Cost of Vertical Mismatch in Canadian Labour Markets. (A. Dar). *CLSRN* (Canadian Labour Market and Skills Researcher Network) – WP154 – 07/2015.
- Immigration and Location Choices of Native-Born Workers in Canada. *CLSRN* – WP130 – 03/2014.
- Economic Benefits of Studying Economics in Canada: A Comparison of Wages of Economics Majors with those in Other Disciplines Circa 2005. *CLSRN* – WP109 – 02/2013.
- Intergenerational Transfers and Expectations: A Note on How a Ponzi Scheme Affects Consumption. *NFI* (Networks Financial Institute at Indiana State University) - 2008-WP-11.
- A Dynamic Inconsistency Problem in Optimal Policies of PAYG. *NFI* 2008-WP-07.
- Wealth Creation and Expected Fairness of the Turkish PAYG System. *NFI* 2007-WP-21.
- Social Security, Intergenerational Transfers, and Saving: New Evidence from a Developing Country. *NFI* 2007-WP-6.
- Saving and Social Security Wealth: A Case of Turkey. *NFI* 2007-WP-03.

Conference Papers (Refereed - last 4 years)

- *EUHEA 22 Conference* ([European Health Economics Association](#)) “Understanding the dynamics of a viral spread by sparse composite likelihood selection.”
- *Canadian Economic Association*, Ottawa Canada, June 2022. “Understanding the dynamics of a viral spread by sparse composite likelihood selection.”
- *AEDE XXIX Economics of Education Association*. July, 2021. Native-born-immigrant wage gaps in Canada: Market imperfections or differences in human capital endowments? (with A. Dar)
- *BigSurv20 Big Data Meets Survey Science*. November, 2020. Utrecht, Netherlands. “What can be predicted from a national health survey? Is cancer one of them?”
- *European Union Health Economics Association EUHEA 2020 Conference*, Oslo July 9. What can be predicted from a national health survey? Is cancer one of them?.
- *Canadian Research Data Centre Network (CRDCN) 2019 National Conference*, Halifax, October 2019. “What can be predicted from CCHS? Is cancer one of them?” (with Mutlu Yuksel).
- *Canadian Economic Association*, Banff, Alberta, Canada, June 2019. “Son Preferring Fertility Behaviors in Turkey” (MC. Robitaille-Blanchet).
- 13th Annual Meeting of the *Portuguese Economic Journal*, Evora, July 2019. ““Son preference, Sex-Selective Abortions, and Birth-Spacing in Canada”.
- *IZA World Labor Conference*, Berlin 2018, “Information constraint and assortative preferences in choice of major.”
- *European Society for Population Economics (ESPE)*, June 2018, Antwerp, Belgium, “Information constraint and assortative preferences in choice of major.”
- *Canadian Economic Association*, Montreal, Canada, June 2018. “Son preference, Sex-Selective Abortions, and Birth-Spacing in Canada” (With MC. Robitaille-Blanchet)
- *European Association of Labour Economists (EALE)*, St. Gallen, Switzerland, September 2017. “Information constraint and assortative preferences in choice of major.”
- *Canadian Economic Association*, NS, Canada, June 2017. “Intergenerational transmission of field of study.” and “Asymmetric information and the immigrants’ wage gap in Canada.”
- *International Association of Applied Econometrics*, June 2016, Milan. “Developing an Index of Field-of Study Relatedness for Measuring Occupational Mismatch in Canadian Labour Markets.”
- *Canadian Economic Association*, Ottawa, Canada, June 2, 2016. “Is the Lower Return to Foreign Education a Postarrival Problem in Canada?”

Invited/Workshops (Last 4 years)

- 1st Workshop of Applied Microeconomics. Invited presentation: Application of “dominance analysis” with health data: Identifying regional spreaders of a viral pathogen and their socio-spatial predictors in Nova Scotia. August 23-24 2022.
- 1st Joint Workshop of Applied Macro/Microeconomics. Invited presentation: “Causal Predictors of Cancer”. Free University of Bolzano. December 16-18, 2021
- Free University of Bolzano. October 20, 2021. Invited presentation: [Dynamics of the COVID-19 Spreadt by Modified Graphical Network Analysis](#).
- SIde - Societa Italiana Di Econometria, (June 2019). Bank of Italy, Bertinoro, Italy. *Summer School on Machine Learning Algorithms for Econometricians*. 6 Days.
- Tinbergen Institute *Summer School on Genome-wide Data Analysis* - Amsterdam 2018. 5 Days.
- Valencia International *Bayesian Analysis Summer School*, VIBASS2 - University of Valencia, 2018. 6 Days.
- SIde - Societa Italiana Di Econometria, (June 2017). Bank of Italy, Perugia, Italy. *Summer School on High-Dimensional Econometrics*. 6 Days.

Grants/Awards

- [Research Nova Scotia](#) (2020) Principle Investigator \$34,900 – [The Nova Scotia COVID19 Research Coalition](#). *The role of environmental determinants and social mobility in viral infection transmission in Halifax*.
- [TUBITAK](#) (2014) \$30,000, Principle Investigator *Homeownership and Duration of Unemployment in Turkey*.
- Atlantic Metropolis Centre (2011) \$5,000, Pilot Project Grant on immigration.
- [NFI Indiana State University](#) (2008) \$19,500, *Social Security and Generational Accounting*.
- University of Delaware (2006) \$2,000, Graduate Dissertation Fellowship Award.
- Internal research grants (2007 – 2021) \$41,000 (in total), several different projects awarded by University of Windsor and Faculty of Graduate Studies and Research, Saint Mary’s University.

Graduate Supervision

- Masters of Finance, Thesis 2021, Tariqal Islam,
- Masters of Finance, Thesis 2020, Yeonsil Yi,
- Masters of Applied Economics, MRP 2020, Jahnae Cox,
- Masters of Science in Computing & Data Analytics, Thesis 2019, Diven Sambhwani,
- Masters of Applied Economics, MRP 2017, Pat Marcuccio,
- Masters of Applied Economics, MRP 2016, Claudia Zamai,
- PhD in Economics, Dissertation 2009, Azad Haidar.

Teaching

- Higher Education Teaching Certification (a two-year special program for selected PhD students), at the University of Delaware (2003–2005).

Courses (Saint Mary’s University, 07/2007 – Present):

- Machine Learning & Artificial Intelligence (**Master’s Business Analytics**),
- Applied Statistics and Data Analysis (**Master’s in Finance**),
- Econometrics and Business Forecasting (**Master’s in Finance**).
- Machine Learning and Economics (**Master’s in Applied Economics**)
- Introduction to Applied Machine Learning in R,
- Mathematical Economics,
- Econometrics,
- Intermediate Statistics,

- Research Seminar in Economics,

Achievements

- I was nominated to *Fr. William A. Steward Medal of Excellence in Teaching* by students in Saint Mary's University (2017),
- I was awarded *Excellent Teaching Award* at the University of Delaware (2005).
- I was awarded as the *Best Teacher* in the Summer School of Sabanci University (2005).
- To enhance students' data management skills and establish a more productive learning environment for data analytics techniques, I have designed a program for MEA and honour students (Economics) by Statistics Canada's Atlantic Research Data Centre to access major confidential micro data files. This program has been shown as a model program to other universities in Canada.
- I have developed and taught a course, **Introduction to Applied Machine Learning with R** in Winter 2020. It is the first and only machine learning course in the Sobey School of Business that also has programming Labs.

Service

University activities

- Invited to President's Research Roundtable for Artificial Intelligence. (October 16, 2020)
- Served in a special committee preparing a proposal for the Sobey School of Business Strategic Plan 2020-25,
- A member in Research Advancement Committee,
- A member in BComm Committee,
- Organized weekly Brown-Bag meetings in 2015 and 2016 at Sobey School of Business.

Contributions to the profession and community

- Co-organizer (24-25 August 2022) of [1st Workshop of Applied Microeconomics](#).
- Co-founder of [MLportal](#), Research Portal on Machine Learning for Social and Health Policies,
- Organizer and lecturer of at [Summer School](#) (July 20-23, 2020) "Machine Learning for Economists and Applied Social Scientists",
- Organizer a [webinar](#) series at MLportal (July 23-24, 2020) "Machine Learning for Economists and Applied Social Scientists",
- Serving as a referee 7-10 times in multiple academic journals annually including the Journal of Housing Economics, Regional Science, IZA Journal of Labor Economics, Journal of Population Economics, Applied Economics.
- Member of the [Reimagining the Future for Nova Scotians](#),
- My work was also featured in newspapers, social media, CBC, Global News, and National Post. [See the latest Global News](#) and [here in CBC National](#).
- Presenter at [Community Revitalization & Prosperity Network](#) on [What Machine Learning Can tell Us About the Post-Pandemic Labour Market](#).