

Kyran Cupido

St. Francis Xavier University
Department of Mathematics & Statistics
4130 University Ave
Antigonish, Nova Scotia, Canada, B2G 2W5

kcupido@stfx.ca
Website: cupidok.github.io
LinkedIn: [Kyran-Cupido](#)
Phone: +1 (905) 512-0480

Research Interests

Methodological

Data Science, Geospatial Analysis, Spatial Point Processes, Spatial Regression Modelling, Statistical Demography

Domain

Longevity Risk, Property & Casualty, Health Insurance

Academic Appointments

St. Francis Xavier University, Antigonish, Nova Scotia, Canada
Assistant Professor, Department of Mathematics & Statistics
July 2020 - Present

Education

Arizona State University, Tempe, Arizona, USA
School of Mathematical and Statistical Sciences
Ph.D. Statistics, 2017 - 2020.
Advisor: Dr. Petar Jevtić

McMaster University, Hamilton, Ontario, Canada
Department of Mathematics and Statistics
M.Sc. Statistics, 2016 - 2017.

Brock University, St. Catharines, Ontario, Canada
Department of Mathematics and Statistics
B.Ed. Education, 2014 - 2015.
B.Sc. Mathematics, 2010 - 2015.

Peer-Reviewed Publications

- [1] Johnson, R., Al-khateeb, S., Cupido, K., Madouh, M. and Romney, M. "Cheating or Fair Competition? A Structuration Analysis of Social Media Responses to Lia Thomas' NCAA Swimming Championship." *Communication & Sport* 0(0) (2025): 1-23. <https://doi.org/10.1177/21674795251330304>
- [2] Cupido, K., Jevtić, P, Regis, L, and Zhou, KQ. "Spatial Natural Hedging – A General Framework with Application to the Mortality of U.S. States" *Scandinavian Actuarial Journal* (2024): 1-29. <https://doi.org/10.1080/03461238.2024.2365977>

- [3] Kerr, D., and Cupido, K. "Population Aging in Atlantic Canada: A Regional Appraisal" *Canadian Studies in Population* 51, 6. (2024).
<https://doi.org/10.1007/s42650-024-00083-3>
- [4] Cupido, K., Jevtić, P., and Boonen, T. "Space, Mortality and Economic Growth" *Journal of Forecasting* (2024): 1–17.
<https://doi.org/10.1002/for.3086>
- [5] Johnson, R., Al-khateeb, S., Forbes, A., and Cupido, K. "Targeted Social Media Harassment: A Comparative Analysis of Toxicity Directed at Men and Women Sports Reporters" *Communication & Sport* 0(0) (2023): 1-23.
<https://doi.org/10.1177/21674795231213330>
- [6] Cupido, K., and McClure, O. "Spatio-temporal Analysis of Human Mortality in Canada" *Canadian Studies in Population* (2022): 1-16.
<https://doi.org/10.1007/s42650-022-00071-5>
- [6]7 Cupido, K., Fotheringham, A.S., and Jevtić, P. "Local Modeling of U.S. Mortality Rates: A Multiscale Geographically Weighted Regression Approach" *Population, Space and Place* 27.1 (2020): e2379.
<https://doi.org/10.1002/psp.2379>
- [8] Cupido, K., Jevtić, P., and Paez, A. "Spatial Patterns of Mortality in the United States: A Spatial Filtering Approach" *Insurance: Mathematics and Economics* 95 (2020): 28-38.
<https://doi.org/10.1016/j.insmatheco.2020.08.003>

Conference Publications

- [1] Delamer, J.-A., Cupido, and Givigi, S. "Graph Neural Network to Solve the Dynamic Emergency Vehicles Routing Problems" *IEEE SysCon 24*
<https://doi.org/10.1109/SysCon61195.2024.10553609>

Technical Reports

- [1] Martinez, W., Cupido, K., Jevtić, P., and Su, J. "[Social and Other Determinants of Life Insurance Demand](#)" August 2022, The Society of Actuaries (SOA).

Papers in Review

- [1] " Racism, Sexism, and Toxic Affect: An Analysis of Reddit Posts about Angel Reese's "Taunting" of Caitlin Clark" with R. Johnson, A. Forbes and J. McGuire. (Submitted to *Communication & Sport*)
- [2] " Determinants of Spatio-Temporal Patterns of Cybercrimes in the USA: Implications for Cybersecurity Personnel Resource Allocation" with S. Chiaradonna, C. Delos Santos, and P. Jevtic (Submitted to *Journal of Quantitative Criminology*)
<https://doi.org/10.2139/ssrn.4881010>

[3] “The Spatial Dynamics of Fertility Rates in Canada” with D. Kerr
(Revisions submitted to *Population, Space and Place*)

Working Projects

[1] “Extraction and Classification of Spatial Features in Urban Maps for use in Kernel Density Estimation of Traffic Accidents” with P. Jevtić and S. Pesic (Target: *Accident Analysis & Prevention*)

[2] “The Electoral Geography of Local Campaign Diversification” with R. Currie-Wood

[3] “COVID-19 Recovery by Province and Industry” with I. Beaton

Contributed Talks

[1] June 2025, Toronto, Ontario. [*Annual Meeting of the Canadian Population Society*](#) “Local Investigations of Mortality Rates in Atlantic Canada” by K. Cupido, and A. D’Amico

[2] June 2024, St. John’s, Newfoundland. [*Statistical Society of Canada Annual Meeting 2024*](#) “Spatial Natural Hedging – A General Framework with Application to the Mortality of U.S. States” by K. Cupido, P. Jevtić, L. Regis, and K. Zhou

[3] May 2023, Toronto, Ontario. [*Annual Meeting of the Canadian Population Society*](#) “Investigating the Spatial Dynamics of Fertility Rates in Canada” by K. Cupido, and D. Kerr

[4] June 2022, Virtual Conference. [*Statistical Society of Canada Annual Meeting 2022*](#) “Space, Mortality and Economic Growth” by K. Cupido, P. Jevtić, and T. Boonen

[5] August 2020. Virtual Conference, [*Actuarial Research Virtual Conference*](#) “Local Modeling of U.S. Mortality Rates” by K. Cupido, A.S. Fotheringham and P. Jevtić

[6] August 2018. London, Ontario, [*Actuarial Research Conference*](#) “Spatial Filtering Approach to Mortality Modeling” by K. Cupido, P. Jevtić and A. Paez

Presentations

[1] November 2024, St. Francis Xavier University. The StFX Fall Research Chairs Colloquium. “Mapping Longevity: Using Spatial Models to Understand Mortality Rates.”

[2] November 2024, Nova Scotia Pension Services Corporation. Joint Trustee Education Day 2024. “Mortality—A Matter of Life & Death?”

[3] October 2024, Canadian Statistical Sciences Institute. Atlantic Canada Data Science Tour. “Incorporating Data-driven Models towards Actuarial Problems.”

[4] June 2022, Texas State University. Guest Lecture, MC 4329. “Quantifying Uncertainty: An Introduction to the Study of Risk.”

- [5] October 2021, Arizona State University Professional Development Seminar. “Navigating the Start of an Academic Career (During a Pandemic....)”
- [6] October 2021, St. Francis Xavier University Mathematics & Statistics Senior Seminar. “Analyzing Patterns in Human Mortality Rates.”
- [7] September 2020, Arizona State University. Guest Lecture, JMC 454: Advanced Issues in Sport and Media, “What are the Odds? An Introduction to Sports Statistics.”
- [8] March 2020, Arizona State University. Guest Lecture, JMC 454: Advanced Issues in Sport and Media, “Sports Gambling and Betting, Fantasy Sports”
- [9] October 2018, Arizona State University Graduate Statistics Seminar. “Quantifying and Modeling Spatial Patterns.”

Workshops, Summer Schools, Conferences

- [1] June 2025, Montreal, Quebec, [*CanCOTS 2025*](#); Interactive R Tutorials for Learning and Assessments.
- [2] June 2024, St. John’s, Newfoundland, [*SSC 2024*](#); Statistical Education Workshop
- [3] May 2023, Ottawa, Ontario, [*SSC 2023*](#); Statistical Education Workshop
- [4] May 2022, Virtual Conference, [*Canadian Population Society Annual Meeting*](#)
- [5] June 2021, Virtual Conference, [*SSC 2021*](#); Statistical Education Workshop
- [6] May 2021, Virtual Conference, [*Canadian Population Society Annual Meeting*](#)
- [7] August 2020, Virtual Conference, [*Actuarial Research Virtual Conference*](#)
- [8] August 2020, Virtual Conference, [*Joint Statistics Meeting*](#)
- [10] July 2020, Virtual Conference, [*Society for Industrial and Applied Mathematics Annual Meeting*](#)
- [11] July 2020, Virtual Conference, [*Use R! 2020: The R User Conference*](#)
- [12] July 2019, L’Aquila, Italy, [*Summer School in Smart City Development*](#)
- [13] June 2019, Toronto, Ontario, [*Big Data and Artificial Intelligence Toronto*](#)
- [14] August 2018, London, Ontario, [*Actuarial Research Conference*](#)
- [15] June 2018, Toronto, Ontario, [*Big Data Toronto*](#)

Teaching Experience

St. Francis Xavier University, Antigonish, Nova Scotia, Canada
Instructor

- Fall 2024: Statistical Learning and Data Mining (STAT 445)
- Winter 2024: Mathematical Statistics (STAT 334)
- Winter 2024: Statistical Methods (STAT 331)
- Winter 2024: Statistics for Students in the Sciences (STAT 231)
- Fall 2023: Statistics for Students in the Sciences (STAT 231)
- Fall 2023: Regression Analysis (STAT 357)
- Winter 2023: Statistical Methods (STAT 331)
- Winter 2023: Statistical Learning and Data Mining (STAT 445)

- Fall 2022: Introductory Statistics (STAT 101), Course Coordinator
- Fall 2022: Statistics for Students in the Sciences (STAT 231)
- Winter 2022: Statistical Methods (STAT 331)
- Winter 2022: Regression Analysis (STAT 357)
- Fall 2021: Introductory Statistics (STAT 101), Course Coordinator
- Fall 2021: Statistics for Students in the Sciences (STAT 231)
- Winter 2021: Survey Sampling Design (STAT 311)
- Winter 2021: Statistical Methods (STAT 331)
- Fall 2020: Statistics for Students in the Sciences (STAT 231)
- Fall 2020: Introductory Statistics (STAT 101)

Arizona State University, Tempe, Arizona, USA

Instructor

- Spring 2020: Statistics for Biosciences (STP 231)
- Fall 2019: Statistics for Biosciences (STP 231)

Teaching Assistant

- Summer 2019: Applied Linear Algebra (MATLAB 343)
- Spring 2019: Experimental Statistics (STP 429)
- Spring 2019: Machine Learning (STP 598)
- Fall 2018: Applied Regression Analysis (STP 530)
- Spring 2018: Applied Analysis of Variance (STP 531)
- Spring 2018: Experimental Statistics (STP 429)
- Fall 2017: Introductory Applied Statistics (STP 420)
- Fall 2017: Mathematical Structures (MAT 300)

McMaster University, Hamilton, Ontario Canada

Teaching Assistant

- Winter 2017: Calculus for the Physical Sciences & Engineering Mathematics (MATH 1A03/1Z03)
- Fall 2016: Introductory Calculus for Humanities & Social Sciences (MATH 1K03)

Student
Supervision

Supervised Summer Research Students

- Christopher Richard and Adrianna D'Amico, *Spatial Analysis on the Accessibility of Mental Health Services to Youth in Need*, 2025
- Simon Maltby, *Spatiotemporal Analysis of Voter Turnout in Nova Scotia* NSERC Undergraduate Student Research Awards 2024
- Adrianna D'Amico and Adam Stalker, *Local Investigations of Life Expectancy in Atlantic Canada*, 2024
- Samantha Brooks *Opportunities for Change: Exploring Nova Scotians' Quality of Life and Wellbeing*, 2024
- Isaac Ombotimbe, *Spatially Analyzing Traffic Accident Data for Optimal Emergency Vehicles Routing Strategy*, NSERC Undergraduate Student Research Award Black Scholar 2023

- Simon Maltby, *Investigating the Spatial Distribution of the Underlying Risk Factors for COVID-19 in Canada*, Research Nova Scotia Scotia Scholars Undergraduate Award 2023
- Madelaine Davis, *Provincial Models of Pandemic Business Interruption Insurance*, 2023
- Isaac Ombotimbe, *An Investigation of the Spatial Patterns of Canadian Traffic Accidents*, 2022
- Olivia McClure, *An Empirical Study of Canadian Mortality*, University Council for Research Award, 2021

Supervisor for Undergraduate Honours Theses

- Simon Maltby, *Factors Influencing Voter Turnout in Nova Scotia*, 2024

Second Reader for Undergraduate Honours Theses

- Tiffany Bondoc, *Exploring Colorectal Cancer in Atlantic Canada and the Effects of Low-Penetrance Genes*, 2022
- April Long, *An Analysis of Income Inequality in Ghana Using GLSS 7 Data*, 2021

External Reviewer for Masters Theses

- Ethan Heavey, *Chat NPC*, 2024
- Anik Das, *A Novel Tweet Dataset and Comparative Analysis of BERT Based Classification Models For Phobia Subtypes Detection*, 2023

Grants and Awards

StFX University Research/Publication/Teaching Award, 2025: \$1,660
 NSERC Discovery Grant, 2025: \$187,500
 StFX University Research/Publication/Teaching Award, 2024: \$1,683
 W. F. James Research Scholar in the Pure and Applied Sciences, 2024
 SSC New Investigator Presentation Award (Runner Up), 2024 \$200
 SSHRC Insight Development Grant, 2023: \$49,486
 StFX University Research/Publication/Teaching Award, 2023: \$1,570
 Canadian Institute of Actuaries Academic Research Program, 2022: \$12,435
 StFX University Research/Publication/Teaching Award, 2022: \$1,875
 StFX University Research/Publication/Teaching Award, 2021: \$1,697
 StFX University Council for Research Award, 2021: \$7,000
 StFX University Start-up Grant, 2020: \$10,000
 CLAS Student Leadership Award, 2018
 Summer Research Block Grant, 2018: \$5,000
 Deans Honour's List, 2012 - 2014

Professional Memberships

Statistical Society of Canada. Statistical Education Section
 Canadian Population Society
 Canadian Mathematical Society

University Service

St. Francis Xavier University, Antigonish, Nova Scotia, Canada

- Faculty Development Committee. 2025 - Present
- Mathematics & Statistics Teaching and Learning Committee , 2022- Present
- Committee on Research Integrity, 2024 - 2025
- Appeals Committee, 2021 - 2024
- Recording Secretary, Department of Mathematics & Statistics, 2022 - 2024
- Review Committee: StFX Undergraduate Student Research Awards, 2023
- Data Science Programming Committee
- Actuarial Science Programming Committee
- Review Committee: StFX Undergraduate Student Research Awards, 2022

Arizona State University, Tempe, Arizona, USA

- President: ASU Chapter of the American Mathematical Society, 2019
- Vice President: ASU Chapter of the American Mathematical Society, 2018
- Communications Officer: Committee for Peer Mentoring at SoMSS at ASU
- Volunteer: Datafest, Math Day at ASU, CryptoRally, Open Door

Personal Information

Date of Birth: August 17, 1992. Citizenship: Canadian. Married.