Kyran Cupido

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Department of Mathematics & Statistics
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Research Interests

Methodological
Data Science, Geospatial Analysis, Spatial Point Processes, Spatial Regression, Stochastic Processes, Mathematical Geography

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] Cupido, K., Jevtić, P., and Paez, A. "Spatial Patterns of Mortality in the United States: A Spatial Filtering Approach" *Insurance: Mathematics and Economics.* https://doi.org/10.1016/j.insmatheco.2020.08.003

[2] Cupido, K., Fotheringham, A.S., Jevtić, P. "Local Modeling of U.S. Mortality Rates: A Multiscale Geographically Weighted Regression Approach" *Population, Space and Place.* https://doi.org/10.1002/psp.2379

Papers in Review

[1] "Space, Mortality and Economic Growth" with P. Jevtić, and T. Boonen (Submitted to *Journal of Forecasting*)

Working Projects

[1] "Generalized Cluster Weighted Models Applied to Chain-Ladder Reserving" with P. Jain, P. Jevtić and T. Boonen

[2] "Extraction and Classification of Spatial Features in Urban Maps for use in Kernel Density Estimation of Traffic Accidents" with P. Jevtić and S. Pesic

[3] "Spatial Evaluation of Risk Associated with Smart City Lighting Detection Systems" with P. Jevtić and A. Bergstrom

Contributed Talks

[1] August 2020. Virtual Conference, *Actuarial Research Virtual Conference* "Local Modeling of U.S. Mortality Rates" by K. Cupido, A.S. Fotheringham and P. Jevtić

[2] August 2018. London, Ontario, *Actuarial Research Conference* "Spatial Filtering Approach to Mortality Modeling" by K. Cupido, P. Jevtić and A. Paez

Presentations

[1] September 2020, Arizona State University. Guest Lecture, JMC 454: Advanced Issues in Sport and Media, "What are the Odds? An Introduction to Sports Statistics."

[2] March 2020, Arizona State University. Guest Lecture, JMC 454: Advanced Issues in Sport and Media, "Sports Gambling and Betting, Fantasy Sports"

[3] October 2018, Arizona State University Graduate Statistics Seminar. "Quantifying and Modeling Spatial Patterns"

Workshops, Summer Schools, Conferences

[1] August 2020, Virtual Conference, *Actuarial Research Virtual Conference*

[2] August 2020, Virtual Conference, *Joint Statistics Meeting*

[3] July 2020, Virtual Conference, *Society for Industrial and Applied Mathematics Annual Meeting*

[4] July 2020, Virtual Conference, *Use R! 2020: The R User Conference*

[5] July 2019, L'Aquila, Italy, *Summer School in Smart City Development*

[6] June 2019, Toronto, Canada, *Big Data and Artificial Intelligence Toronto*

[7] August 2018, London, Canada, *Actuarial Research Conference*

[8] June 2018, Toronto, Canada, *Big Data Toronto*

Teaching Experience

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

- 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)

Hamilton Catholic Wentworth District School Board
Teacher

- Fall/Winter 2016: Calculus and & Vectors for University Preparation (MCV 4U)
- Summer 2015: Principles of Mathematics (MPM 1D)

Brock University, St. Catharines, Ontario Canada
Student Development Centre Drop-in Mathematics Support Officer & Tutor

Grants and Awards

StFX University Council for Research Award, 2021
CLAS Student Leadership Award, 2018
Summer Research Block Grant, 2018
Deans Honour's List, 2012 - 2014

Professional Memberships

Statistical Society of Canada
Canadian Population Society
Society for Industrial and Applied Mathematics
Canadian Mathematical Society

University Service

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

Community Service

Coaching: Hamilton Lacrosse Association, Lawfield Minor Hockey Association, Hamilton Catholic District School Board, Gage Park Softball Association

Tutoring: Notre Dame House Youth Shelter, Hamilton Ontario. House of Hope, St. Catharines Ontario

Personal Information

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