

Education

- Sept 2004 – Jan. 2009 Queens University, Kingston, Ontario
Doctor of Philosophy (Statistics)
- *Specialized in Time Series Analysis*
- May 2002 – Dec. 2003 Dalhousie University, Halifax, Nova Scotia
Master of Applied Science (Electrical Engineering)
- *Specialized in Signal Processing*
- Sept. 1998 – April 2002 Acadia University, Wolfville, Nova Scotia
Major in Computer Science w/ Math and Physics

Skills

Numerical Analysis

- **Statistical:** Econometrics, Time Series Modelling, Forecasting, Spectral Analysis, Hypothesis Testing, Random Variables, Time/Frequency Domain Filtering, Probability, Stationary Processes, Data Fitting, State Space Models, Linear/Non-linear Systems, Hypothesis testing, Image Analysis and Processing

Software

- **Languages:** C/C++, Java, Visual Basic
- **Statistical:** SAS, MATLAB, R/Splus
- **Database Development:** SQL, PLSQL, Oracle Form Developer
- **Web Development:** Oracle Portals, HTML, XML, Servlets, JSP, Jakarta

Relevant Work History

- Dec. 2008 – Present Institute for Work and Health, Toronto, ON
Statistician (Health and Labour Economics)
- Econometrics, multivariate regression models, business cycles, time series forecast models
 - Programming in SAS, R and MATLAB
 - Research grant writing, writing and presenting technical work
- Jun. 2006 – Jun. 2007 Queens University, Kingston, ON
Statistical Programmer
- Utilized various image processing algorithm techniques
 - Developing real time image processing prototype software using Visual C++
- Jan. 2004 – Present Queens University, Kingston, ON

Research Assistant

- Assisted in the implementation of Solar Radio Burst Locator Telescope (SRBL) Project
- Developed, implemented and designed digital filters

Sept. 2001 – Dec. 2001 Acadia University, Wolfville, NS

Computer Programmer

- Developed Oracle Web Portals using PLSQL, Java, XML, HTML and JSP
- Debugged system for Co-op Employment Centre which was written with Oracle Forms

May 2001- Aug. 2001 Quest Software, Halifax, NS

Quality Assurance Tester

- Wrote and modified test scripts in a scripting language for network administrators
- Verified and logged bugs

Publications and Presentations

- 1 **Discrete Time Forecasting of Worker Injury Rates**, submitted to Journal of Forecasting, Fall 2009.
- 2 **Observations on Surgical Demand Time Series: Detection and Resolution of Holiday Variance**, *Anesthesiology*, 109(3):408-16, Sept. 2008.
- 3 **Modelling Holiday Variance In Surgical Demand Time Series**, *CORS Annual Meeting in London Ontario*, May. 13-16, 2007
- 4 **Modelling and Analysis of Surgical Demand in the Operating Room**, *INFORMS Annual Meeting in Pittsburgh*, Nov. 5-8, 2006
- 5 **Periodic Behaviors in the Production of Surgical Services**, *CORS / Optimization Days 2006 Joint Conference Montreal*, May 8-10, 2006
- 6 **Prolate Spheroidal Wave Functions, an Introduction to the Slepian series and its Properties**, *Applied and Computational Harmonic Analysis*, vol. 16, no. 3, pp 208-230, May 2004

Other

- Member of Queens Triathlon Team, 2006/07
- Co-president and founder of the Pi Club 2005/07
- Volunteer Math Tutor, 2002/03
- President of Acadia Ski Club, 2000