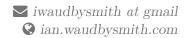
Ian Waudby-Smith



Education

- 2019 present PhD, Statistics, Carnegie Mellon University, Pittsburgh, PA.
 - 2013 2018 BMath, Joint Honours in Pure Mathematics & Statistics (Co-op), University of Waterloo, Waterloo, ON.
 With Distinction Dean's Honours List
 - Fall 2017 Mathematical Sciences (study abroad), Norwegian University of Science and Technology (NTNU), Trondheim, Norway.

Research Experience

- Apr Aug 2019 Research Student, The Hospital for Sick Children (SickKids), Toronto, ON. Supervisor: Dr. Eleanor Pullenayegum
 - 2016 2018 Research Assistant, Health Data Science Lab, University of Waterloo, Waterloo, ON.

Supervisors: Dr. Joel Dubin & Dr. Joon Lee

- Sentiment analysis and mortality in intensive care patients link to paper.
- Apr Aug 2017 **Research Assistant**, Department of Statistics, University of Waterloo, Waterloo, ON.

Supervisor: Dr. Pengfei Li

- Robust statistical tests for zero-inflated data link to R package.
- Jan Apr 2017 **Research Assistant**, Department of Pure Mathematics, University of Waterloo, Waterloo, ON, Canada.

Supervisor: Dr. Yu-Ru Liu

- Sieve methods in analytic number theory.
- Jan Apr 2016 **Student Analyst Strategic Analytics**, Cancer Care Ontario, Toronto, ON. Supervisor: Dr. Zhihui (Amy) Liu
 - Multi-state models for forecasting chronic kidney disease progression link to conference poster.

Teaching Experience

- Jan Mar 2019 **Graduate Teaching Assistant**, *University of Washington*, Seattle, WA. BIOST 508: Biostatistical Reasoning for the Health Sciences
- Sept Dec 2018 **Graduate Teaching Assistant**, University of Washington, Seattle, WA. BIOST 511: Medical Biometry I

Industry Experience

- Apr Aug 2015 **R&D Developer**, DST Systems (c/o IFDS), Toronto, ON.
 - Developed a MapReduce program to perform fuzzy string comparison.
 - Wrote an XML to CSV converter for use with Hadoop's Distributed File System.
 - Built a distributed application on the Ethereum blockchain network.
 - Designed and built a Ruby on Rails application for a technology conference.
- Sept Dec 2014 **Developer**, PureFacts Financial Solutions, Toronto, ON.
 - Implemented an error handling pattern for fail-safe API calls.
 - Created a tool similar to 'git stash' for subversion.
 - Developed a web application for employee time-tracking.
- Jan Apr 2014 Software Developer, Leonardo Worldwide Corporation, Toronto, ON.
 - Managed and delegated support tasks to a team of developers.
 - Wrote scripts to optimize retrieval and storage of images and videos.
 - Created a video encoding scheme for multiple file formats and resolutions.

Publications

I. E. R. Waudby-Smith, N. Tran, J. A. Dubin, and J. Lee. Sentiment in nursing notes as an indicator of out-of-hospital mortality in intensive care patients. *PLOS ONE*, 13(6), 2018.

Presentations

- Jun 2016 Multi-state models for chronic kidney disease prevalence projections in Ontario, Statistical Society of Canada Annual Meeting, St. Catherines, ON. Poster presentation.
- Jun 2016 Multi-state models for chronic kidney disease prevalence projections in Ontario, Statistical Society of Canada Student Conference, St. Catherines, ON.

 Oral presentation.
- Apr 2016 Sequence analysis of patient-care pathways: A study of colorectal cancer in Ontario, Cancer Care Ontario Research Day, Toronto, ON.

 Poster presentation.

Projects

- Sept 2017 rbtt, University of Waterloo, Waterloo, ON.
 - Developed and currently maintain an R package to perform robust inference on non-negative, zero-inflated data. Created with Dr. Pengfei Li at the University of Waterloo.
- Sept 2015 HackTheNorth, University of Waterloo, Waterloo, ON.
 - Visualized the sentiment of tweets referring to Canadian political parties.
 - Retrieved tweets using the python library, tweepy.
- Feb 2015 **DeltaHacks**, McMaster University, Hamilton, ON.
 - Made Wikipedia accessible via SMS using Twilio and the Wikipedia API.

Computational Skills

languages

Programming R, Python, Java, C++, Scheme, JavaScript

Technologies SQL, Linux, git, Hadoop, LATEX

Awards

- 2018 2019 UW Top Scholar Recruitment Award, University of Washington, Seattle, WA.
- 2017 2018 David Johnston International Experience Award, University of Waterloo, Waterloo, ON.
- 2016 2017 NSERC Undergraduate Student Research Award, The Natural Sciences and Engineering Research Council of Canada.
- 2016 2017 President's Research Award (1), University of Waterloo, Waterloo, ON.
- 2016 2017 President's Research Award (2), University of Waterloo, Waterloo, ON.
- 2013 2014 University of Waterloo President's Scholarship of Distinction, University of Waterloo, Waterloo, ON.
- 2012 2013 **Top Ontario Scholar**, Peel District School Board, Region of Peel, ON.