Ian Waudby-Smith

Education

2019 - present PhD, Statistics, Carnegie Mellon University, Pittsburgh, PA.

2019 - 2020 MS, Statistics, Carnegie Mellon University, Pittsburgh, PA.

2013 - 2018 **BMath, Pure Math & Statistics**, *University of Waterloo*, Waterloo, ON. With Distinction - Dean's Honours List

Publications

- I. Waudby-Smith, A. S. Pickard, F. Xie, and E. M. Pullenayegum. Using both time tradeoff and discrete choice experiments in valuing the EQ-5D: Impact of model misspecification on value sets. *Medical Decision Making*, 2020.
- I. Waudby-Smith and A. Ramdas. Confidence sequences for sampling without replacement. *NeurIPS*, 2020.
- I. Waudby-Smith and A. Ramdas. Variance-adaptive confidence sequences by betting. arXiv preprint arXiv:2010.09686, 2020.
- I. 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.

Teaching Experience

Jan - May 2020 **Graduate Teaching Assistant**, Carnegie Mellon University, Pittsburgh, PA. 36-462: Data Mining

Aug - Dec 2019 **Graduate Teaching Assistant**, Carnegie Mellon University, Pittsburgh, PA. 36-401: Modern Regression

Presentations

- Aug 2020 Confidence sequences for sampling without replacement, Joint Statistical Meetings, Remote due to COVID-19.

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

Experience

June - Aug 2020 Research Data Science Intern, Adobe Inc., Remote due to COVID-19. Supervisors: Dr. David Arbour & Dr. Ritwik Sinha

• Nonparametric confidence sequences for causal effects (paper in progress).

Apr - Aug 2019 Research Student, The Hospital for Sick Children (SickKids), Toronto, ON. Supervisor: Dr. Eleanor Pullenavegum

• Understanding model misspecification in quality-of-life surveys — link to paper.

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.

Computational Skills

languages

Programming R, Python, Haskell, C++

Technologies SQL, Linux, git, LATEX

Awards

- 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.