Ian Waudby-Smith

Education

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

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

GPA: 4.1/4.0

2013 - 2018 BMath, Pure Math & Statistics, University of Waterloo, Waterloo, ON.

GPA: 3.9/4.0, Dean's Honours List

Papers

lan Waudby-Smith and Aaditya Ramdas. Variance-adaptive confidence sequences by betting. *arXiv* preprint, 2021+.

Ian Waudby-Smith and Aaditya Ramdas. Confidence sequences for sampling without replacement. *NeurIPS (Spotlight)*, 2020.

lan Waudby-Smith, A Simon Pickard, Feng Xie, and Eleanor 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.

lan Waudby-Smith, Nam Tran, Joel A Dubin, and Joon Lee. Sentiment in nursing notes as an indicator of out-of-hospital mortality in intensive care patients. *PloS one*, 13(6), 2018.

Experience

Jun - Aug 2020 Research Data Science Intern, Adobe Inc., San Jose, CA.

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 Pullenayegum

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

2016 - 2018 Research Assistant, Health Data Science Lab, University of Waterloo, Water-

loo, 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

Programming Python {numpy, scipy, matplotlib, pandas, sklearn},

languages R {data.table, tidyverse}, Haskell, Scheme, C

Technologies git, SQL, LATEX, Linux

Teaching Experience

Jan - May 2021 **Graduate Teaching Assistant**, *Carnegie Mellon University*, Pittsburgh, PA.

36-708: The ABCDE of Statistical Methods in Machine Learning

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

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.