

Ian Waudby-Smith

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Education

Carnegie Mellon University

PhD, Statistics

Advisor: [Aaditya Ramdas](#)

Pittsburgh, PA

2019–present

Carnegie Mellon University

MS, Statistics

GPA: 4.1/4.0

Pittsburgh, PA

2019–20

University of Waterloo

BMath, Joint Honours Pure Mathematics & Statistics (Co-op)

GPA: 3.9/4.0, Dean's Honours List

Waterloo, Canada

2013–18

Papers

Ian Waudby-Smith, David Arbour, Ritwik Sinha, Edward H. Kennedy, and Aaditya Ramdas. Doubly robust confidence sequences for sequential causal inference. *Under review, JASA*, 2021+.

Ian Waudby-Smith and Aaditya Ramdas. Estimating means of bounded random variables by betting. *Under revision, JRSS-B*, 2021+.

Ian Waudby-Smith, Philip B Stark, and Aaditya Ramdas. RiLACS: Risk limiting audits via confidence sequences. In *International Joint Conference on Electronic Voting (Best paper award)*, pages 124–139. Springer, 2021.

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

Ian 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.

Ian 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

Adobe Inc.

Research Data Science Intern

Supervisors: Dr. David Arbour & Dr. Ritwik Sinha

◦ Nonparametric sequential causal inference — [link to paper](#).

San Jose, CA

Jun–Aug 2020

The Hospital for Sick Children (SickKids)

Research Student

Supervisor: Dr. Eleanor Pullenayegum

◦ Understanding model misspecification in quality-of-life surveys — [link to paper](#).

Toronto, ON

Apr–Aug 2019

Health Data Science Lab, University of Waterloo

Research Assistant

Waterloo, ON

2016–18

Supervisors: Dr. Joel Dubin & Dr. Joon Lee
◦ Sentiment analysis and mortality in intensive care patients — [link to paper](#).

Department of Statistics, University of Waterloo

Research Assistant

Supervisor: Dr. Pengfei Li

◦ Robust statistical tests for zero-inflated data — [link to R package](#).

Waterloo, ON

Apr–Aug 2017

Cancer Care Ontario

Student Analyst - Strategic Analytics

Supervisor: Dr. Zhihui (Amy) Liu

◦ Multi-state models for forecasting chronic kidney disease progression.

Toronto, ON

Jan–Apr 2016

SS&C Technologies

Developer in R&D

◦ Prototyped a distributed application on the Ethereum network.

◦ Built a conference management suite in Ruby on Rails.

Toronto, ON

Apr–Aug 2015

Computational Skills

Programming languages: R, Python, Haskell, Lisp, C

Technologies: git, SQL, *nix, CI/CD

Teaching Experience

Carnegie Mellon University

Graduate Teaching Assistant

◦ 36-708: Statistical Methods in Machine Learning

◦ 36-462: Data Mining

◦ 36-401: Modern Regression

Pittsburgh, PA

2019-21

Awards

Carnegie Mellon University Department of Statistics and Data Science

Teaching Assistant of the Year

Pittsburgh, PA

2021

Adobe Research

PhD Research Gift (\$30,000)

Pittsburgh, PA

2020

University of Waterloo

David Johnston International Experience Award (\$2500)

Waterloo, ON

2018

The Natural Sciences and Engineering Research Council of Canada

NSERC Undergraduate Student Research Award (\$4500)

Waterloo, ON

2017

University of Waterloo

President's Research Award (\$3000)

Waterloo, ON

2016–17

University of Waterloo

University of Waterloo President's Scholarship of Distinction (\$2000)

Waterloo, ON

2014