# Ian Waudby-Smith

#### **Education**

**Carnegie Mellon University** 

PhD. Statistics

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. *arxiv preprint*, 2021+.

lan Waudby-Smith and Aaditya Ramdas. Estimating means of bounded random variables by betting. *submitted*, 2021+.

lan Waudby-Smith, Philip B. Stark, and Aaditya Ramdas. Rilacs: Risk-limiting audits via confidence sequences. *E-Vote-ID (accepted)*, 2021.

lan 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. San Jose, CA

Research Data Science Intern

Jun–Aug 2020

Supervisors: Dr. David Arbour & Dr. Ritwik Sinha

Nonparametric sequential causal inference — link to paper.

#### The Hospital for Sick Children (SickKids)

Research Student

Toronto, ON Apr–Aug 2019

Supervisor: Dr. Eleanor Pullenayegum

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

Health Data Science Lab, University of Waterloo

Research Assistant

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. Penafei Li

• Robust statistical tests for zero-inflated data — link to R package.

**Cancer Care Ontario** Toronto, ON

Student Analyst - Strategic Analytics

Supervisor: Dr. Zhihui (Amy) Liu

Multi-state models for forecasting chronic kidney disease progression.

**SS&C Technologies** Toronto, ON Apr-Aug 2015

Developer in R&D

Prototyped a distributed application on the Ethereum network.

Built a conference management suite in Ruby on Rails.

**Computational Skills** 

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

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

**Teaching Experience** 

**Carnegie Mellon University** 

Graduate Teaching Assistant

o 36-708: Statistical Methods in Machine Learning

o 36-462: Data Mining

o 36-401: Modern Regression

**Awards** 

**Carnegie Mellon University Department of Statistics and Data Science** Pittsburgh, PA

Teaching Assistant of the Year

**University of Waterloo** Waterloo, ON

David Johnston International Experience Award 2017-18

The Natural Sciences and Engineering Research Council of Canada

NSERC Undergraduate Student Research Award 2016-17

Waterloo, ON **University of Waterloo** 

President's Research Award (received twice) 2016-17

**University of Waterloo** Waterloo, ON

University of Waterloo President's Scholarship of Distinction 2013-14

Waterloo, ON

Waterloo, ON

Apr-Aug 2017

Jan-Apr 2016

Pittsburgh, PA

2019-21

2020-21

2016-18