Ian Waudby-Smith

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Education

Carnegie Mellon University — **Pittsburgh, PA**
PhD, Statistics — *2019–present*

Carnegie Mellon University — **Pittsburgh, PA**
MS, Statistics — *2019–20*
GPA: 4.1/4.0

University of Waterloo — **Waterloo, Canada**
BMath, Joint Honours Pure Mathematics & Statistics (Co-op) — *2013–18*
GPA: 3.9/4.0, Dean's Honours List

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+.

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

Ian Waudby-Smith, Philip B. Stark, and Aaditya Ramdas. RiLACS: Risk-limiting audits via confidence sequences. *E-Vote-ID (accepted)*, 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. — **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) — **Toronto, ON**
Research Student — *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 — **Waterloo, ON**
Research Assistant — *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 — **Waterloo, ON**
Research Assistant — *Apr–Aug 2017*
Supervisor: Dr. Pengfei Li
- Robust statistical tests for zero-inflated data — link to R package.

Cancer Care Ontario — **Toronto, ON**
Student Analyst - Strategic Analytics — *Jan–Apr 2016*
Supervisor: Dr. Zhihui (Amy) Liu
- Multi-state models for forecasting chronic kidney disease progression.

SS&C Technologies — **Toronto, ON**
Developer in R&D — *Apr–Aug 2015*
- 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 — **Pittsburgh, PA**
Graduate Teaching Assistant — *2019-21*
- 36-708: Statistical Methods in Machine Learning
- 36-462: Data Mining
- 36-401: Modern Regression

Awards

Carnegie Mellon University Department of Statistics and Data Science — **Pittsburgh, PA**
Teaching Assistant of the Year — *2020–21*

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*

University of Waterloo — **Waterloo, ON**
President's Research Award (received twice) — *2016–17*

University of Waterloo — **Waterloo, ON**
University of Waterloo President's Scholarship of Distinction — *2013–14*