Blair Bilodeau

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DEGREES

In progress	Ph.D.	Statistical Sciences, University of Toronto
		Advisor: Daniel Roy
		Committee: Nancy Reid, Ting-Kam Leonard Wong
2018	H.B.Sc.	Financial Mathematics, Western University
		GPA: 3.97 / 4.00

RESEARCH GRANTS

2020	6,000 CAD	NSERC Michael Smith Foreign Study Supplement
2019–22	105,000 CAD	NSERC Alexander Graham Bell Canada Graduate Scholarship – Doctoral
2018–19	17,500 CAD	NSERC Alexander Graham Bell Canada Graduate Scholarship – Master's
2018–19	15,000 CAD	Queen Elizabeth II Graduate Scholarship in Science and Technology *(Declined)*
2018	4,500 CAD	NSERC Undergraduate Student Research Award
2017	4,500 CAD	NSERC Undergraduate Student Research Award

HONOURS AND AWARDS

2021	Hannan Graduate Student Travel Award, Institute of Mathematical Statistics
2020	Student Ambassador Award, University of Toronto
2020	Best Poster Award, New York Academy of Sciences Machine Learning Symposium
2020	Visiting Graduate Student, Insitute for Advanced Study, Princeton, New Jersey
2018	E. F. and F. W. Burton Graduate Scholarship, University of Toronto
2017	Robert and Ruth Lumsden Scholarship in Science, Western University
2017	Borwein Memorial Prize, Western University
2014–18	Continuing Admission Scholarship, Western University

REFEREED PUBLICATIONS

[†]lead author; [⋆]equal contribution

1. **B. Bilodeau**[†], D. J. Foster, D. M. Roy. (2020). Tight Bounds on Minimax Regret Under Logarithmic Loss via Self-Concordance. *International Conference on Machine Learning*.

2. **B. Bilodeau**[†], D. A. Stanford, M. Goldszmidt, A. Appleton. (2019). Simulated Co-location of Patients Admitted to an Inpatient Internal Medicine Teaching Unit: Potential Impacts on Efficiency and Physician-Nurse Collaboration. *INFOR: Information Systems and Operational Research*.

PREPRINTS

3. **B. Bilodeau**[⋆], A. Stringer[⋆], Y. Tang[⋆]. (2021). Stochastic Convergence Rates and Applications of Adaptive Quadrature in Bayesian Inference. *arXiv:2102.06801*.

4. **B. Bilodeau**[⋆], J. Negrea[⋆], D. M. Roy. (2020). Relaxing the I.I.D. Assumption: Adaptively Minimax Optimal Regret via Root-Entropic Regularization. *arXiv:2007.06552*.

5. **B. Bilodeau**[†], D. A. Stanford. (2020). Average Waiting Times in the Two-Class M/G/1 Delayed Accumulating Priority Queue. *arXiv:2001.06054*.

PRESENTATIONS (CONTRIBUTED AND INVITED TALKS/SEMINARS/COLLOQUIA)

Minimax Rates for Conditional Density Estimation via Empirical Entropy
  Apr 2021   University of Toronto Statistical Sciences Research Day.

Relaxing the I.I.D. Assumption: Adaptively Minimax Optimal Regret via Root-Entropic Regularization
  Mar 2021   University of California, Los Angeles Computer Science Seminar.
  Mar 2021   Massachusetts Institute of Technology Stochastics and Statistics Seminar.
  Feb 2021   RIKEN Center for Advanced Intelligence Project Public Seminar.

Tight Bounds on Minimax Regret under Logarithmic Loss via Self-Concordance
  Aug 2020   American Statistical Association Joint Statistical Meetings Poster Session.
  Mar 2020   New York Academy of Sciences Machine Learning Symposium Poster Session.
  Mar 2020   Institute for Advanced Study Special Year Student Seminar.

Scraping Papers from arXiv and biorXiv using Python
  May 2020   Canadian Statistics Student Conference Invited Workshop.

Average Waiting Times in the Two-Class M/G/1 Delayed Accumulating Priority Queue
  Aug 2019   Canadian Queueing Conference. Toronto, Ontario.
  June 2019   Southwestern Ontario Graduate Math and Stats Conference. Guelph, Ontario.
  May 2019   Canadian Operational Research Society Annual Meeting. Saskatoon, Saskatchewan.

Simulated Co-location of Patients Admitted to an Inpatient Internal Medicine Teaching Unit
  Aug 2018   Canadian Queueing Conference. Edmonton, Alberta.
  July 2018   Operational Research Applied to Health Services Annual Meeting. Oslo, Norway.

EMPLOYMENT

  2019–   Graduate Researcher, Vector Institute, Toronto, Ontario
  2017–18   Undergraduate Researcher, Western University, London, Ontario
  2016   Risk Research Intern, Canada Life, London, Ontario
  2015   Data Analyst Intern, Bell Canada, London, Ontario

TEACHING   UTSG = University of Toronto, St. George

Course Instructor
  2020, 2021   UTSG STA347 Probability Theory

Head Teaching Assistant
  2019   UTSG STA442 Methods of Applied Statistics
  2019   UTSG STA261 Probability and Statistics II

Teaching Assistant
  2021   UTSG STA238 Probability, Statistics, and Data Analysis II
  2019, 2020   UTSG STA257 Probability and Statistics I
  2019   UTSG STA457 Time Series Analysis
  2019   UTSG STA355 Theory of Statistical Practice
  2018, 2020   UTSG STA347 Probability Theory
  2018   UTSG ACT230 Mathematics of Finance for Non-Actuaries

SERVICE

Conference Reviewer
  2021   Algorithmic Learning Theory

Administrative Positions
  2019–   Treasurer, Statistics Graduate Student Association, University of Toronto