## Blair Laurence Bilodeau

WEBSITE www.blairbilodeau.ca ADDRESS 2305-14 York St.
EMAIL blair.bilodeau@mail.utoronto.ca Toronto, Ontario

PHONE +1 (519) 871-4811 M5J 0B1

**EDUCATION** 

**PhD, Statistics**, University of Toronto Sept 2018 – Present

Supervisor: Dr. Daniel Roy

**Honours BSc, Financial Modelling**, University of Western Ontario Sept 2014 – Apr 2018

GPA: 3.97 / 4.00

RESEARCH GRANTS

NSERC Michael Smith Foreign Study Supplement: \$6,000

NSERC Alexander Graham Bell Canada Graduate Scholarship – Doctoral: \$105,000

NSERC Alexander Graham Bell Canada Graduate Scholarship – Master's: \$17,500

Queen Elizabeth II Graduate Scholarship in Science and Technology: \$15,000 (Declined)

NSERC Undergraduate Student Research Award: \$4,500

NSERC Undergraduate Student Research Award: \$4,500

2018 – 2019

2018 – 2019

2018 – 2019

RESEARCH POSITIONS

Doctoral Researcher, University of Toronto & Vector Institute

Jan 2019 – Present

Supervisor: Dr. Daniel Roy

Studying generalization guarantees for sequential prediction. Current project focuses on non-

Lipschitz loss, data-dependent regret bounds, and dimension-free results.

Undergraduate Researcher, University of Western Ontario

May - Aug 2018

Supervisor: Dr. David Stanford

Provided the first characterization of the effect on high priority customers from introducing a delay period for low priority customers in the M/G/1 Accumulating Priority Queue.

Undergraduate Researcher, University of Western Ontario

May - Aug 2017

Supervisor: Dr. David Stanford

Developed a Python simulation model of the internal medicine ward at London's University Hospital to study physician-nurse collaboration efficiency.

RESEARCH VISITS

**Institute for Advanced Study**, Princeton, New Jersey

Jan – Mar 2020

Program: Special Year on Optimization, Statistics, and Machine Learning

Simons Institute for Theoretical Computing, University of California, Berkeley

July 2019

Program: Foundations of Deep Learning

Blair Bilodeau 1 of 3

- [2] B. Bilodeau\*, D.J. Foster, D.M. Roy. (2020). Improved bounds on minimax regret under logarithmic loss via self-concordance. *Submitted to International Conference on Machine Learning*.
- [1] B. Bilodeau\*, D.A. Stanford. (2020). Average waiting times in the two-class M/G/1 Delayed Accumulating Priority Queue. Submitted to Operations Research for Healthcare.

## REFEREED PUBLICATIONS

[1] 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*.

## INVITED TALKS

### Workshop on efficient literature reviews using Python.

Canadian Statistics Student Conference, Ottawa, Ontario.

May 2020

### CONTRIBUTED TALKS

1				4 1	1 1 1		10 1
	mnravad	haiinde	an minimax	roarot iind	ar lagarithmi	e lace wis c	self-concordance.
	mbi o v cu	DUUHUS	vii iiiiiiiiiiaa	i i czi ci uniu	ci iogariumm	c ioss via s	cii-concoi uance.

Department of Statistical Sciences Graduate Research Day, University of Toronto. Oral.	Apr 2020
New York Academy of Sciences ML Symposium, New York City, New York. Poster.	Mar 2020

## Average waiting times in the two-class M/G/1 Delayed Accumulating Priority Queue.

Canadian Queueing Conference, Toronto, Ontario. Oral.	Aug 2019
Southwestern Ontario Graduate Math and Stats Conference, Guelph, Ontario. Oral.	June 2019
Canadian Operational Research Society Annual Meeting, Saskatoon, Saskatchewan, Oral.	May 2019

## Simulated co-location of patients admitted to an inpatient internal medicine teaching unit.

Canadian Queueing Conference, Edmonton, Alberta. Oral.	Aug 2018
EURO Operational Research Applied to Health Services Annual Meeting, Oslo, Norway. Oral.	July 2018

## PROFESSIONAL POSITIONS

Risk Research Intern, Canada Life Insurance, London, Ontario	May – Aug 2016
Data Analyst Intern, Bell Canada, London, Ontario	May – Aug 2015
Level 3 Ice Hockey Referee, Ontario Hockey Federation, London, Ontario	Sept 2010 – Apr 2017

#### TEACHING POSITIONS

## **Course Instructor**, University of Toronto

STA347: Probability Theory	Summer 2020
----------------------------	-------------

### **Head Teaching Assistant**, University of Toronto

STA442: Methods of Applied Statistics	Fall 2019
STA261: Probability and Statistics II	Summer 2019

#### **Teaching Assistant.** University of Toronto

1000 miles 1 and 1	
STA257: Probability and Statistics I	Fall 2019
STA457: Time Series Analysis	Winter 2019
STA355: Theory of Statistical Practice	Winter 2019
STA347: Probability Theory	Fall 2018
ACT230: Mathematics of Finance for Non-Actuaries	Fall 2018

Blair Bilodeau 2 of 3

## HONOURS AND AWARDS

E.F. Burton and F.W. Burton Graduate Scholarship	2018
Robert and Ruth Lumsden Scholarships in Science	2017
Borwein Memorial Prize for top grade in Analysis I	2017
University of Western Ontario Continuing Admission Scholarship	2014 - 2018

# ACADEMIC SERVICE

**Treasurer**, Statistics Graduate Student Association, University of Toronto Sept 2019 – Aug 2020

Blair Bilodeau 3 of 3