

# Christopher Molloy (He/Him/His)

[chris.molloy@queensu.ca](mailto:chris.molloy@queensu.ca)  
416 824 9081

49 Lowther Ave. Toronto, ON  
M5R 1C5

## Education

### **Queen's University**

Ph.D. Computing

NSERC Postgraduate Scholarships – Doctoral Scholarship winner

Relevant Coursework: Data Mining, Deep Learning, Neural and Genetic Computing, Topics in Data Analytics

Kingston, ON  
expected 2024

### **Queen's University**

Bachelor's of Computing in Mathematics (Hons.)

Dean's Honor list 2019-2020

Relevant Coursework: Time Series Analysis, Statistical Inference, Data Analysis, Evolutionary Game Theory

Kingston, ON  
April 2020

## Research Experience

### **Queen's University**

*PhD Researcher*

Kingston, ON  
September 2020 – present

### **BlackBerry LTD**

*Research Technology Student*

Waterloo, ON  
September 2022 – December 2022

### **Queen's University**

*Undergraduate Researcher*

Kingston, ON  
January 2020 – April 2020

## Employment Experience

### **Mitacs – Lab2Market Cybersecurity**

*Entrepreneurial Lead*

Toronto, ON  
January 2023 – April 2023

### **Lunenfeld-Tanenbaum Research Institute**

*Summer Engineer*

Toronto, ON  
April 2019 – August 2019

### **Vouchr**

*Summer Engineer*

Toronto, ON  
April 2018 – August 2018

### **J.F. Brennan Custom Homes**

*Summer Laborer*

Toronto, ON  
April 2017 – August 2017

## Skills

**Computer:** Python (6 years), Git (6 years), Java (3 years), R (3 years), TensorFlow (3 years), MySQL (4 years), C++ (2 years), C (2 years), PyTorch (1 year), MATLAB (1 year), HTML/CSS/JavaScript (8 years)

## Select Publications (2/6)

**C. Molloy**, J. Banks, H. H. Steven Ding, P. Charland, A. Walenstein and L. Li, "Adversarial Variational Modality Reconstruction and Regularization for Zero-Day Malware Variants Similarity Detection," in *2022 IEEE International Conference on Data Mining (ICDM)*, Orlando, FL, USA, 2022, pp. 1131-1136, doi: 10.1109/ICDM54844.2022.00143.

**C. Molloy**, S. H. H. Ding, B. C. M. Fung, and P. Charland, "H4rm0ny: A Competitive Zero-Sum Two-Player Markov Game for Multi-Agent Learning on Evasive Malware Generation and Detection," in *2022 IEEE International Conference on Cyber Security and Resilience (CSR)*, 2022, pp. 22–29. doi: 10.1109/CSR54599.2022.9850345. **This paper was awarded the Best Research Paper Award by the conference chairs.**