

# Kyle Bower

## Data Scientist/Machine Learning Engineer

Highly skilled PhD candidate in Mathematics with a strong background in data science and machine learning. Demonstrated expertise in developing advanced mathematical models and algorithms to solve complex problems. Extensive experience in programming languages such as Python, R, and MATLAB. Seeking a challenging role in data science or machine learning where my mathematical expertise and analytical skills can be leveraged to drive data-driven decision-making and innovative solutions.

✉ kyle.bower@mail.utoronto.ca

📍 Toronto, Canada

🐙 github.com/kylebower

📞 +1 (604) 401-4234

🌐 linkedin.com/in/kylewbower

## WORK EXPERIENCE

### Head Graduate Teaching Assistant University of Toronto

2017 - Present

Toronto, ON

#### Achievements/Tasks

- Developed a script to automatically assign 1,500+ students to tutorial groups. (Python)
- Mentored 100+ students each term in weekly tutorials, held office hours, invigilated exams, and graded tests for undergraduate math courses.
- Led orientation and regular training for aspiring and new teaching assistants.

### Cryptanalyst Intern Communications Security Establishment

2017

Ottawa, ON

#### Achievements/Tasks

- Performed cryptologic research, designed, developed, assessed, and attacked cryptographic algorithms and protocols to support Government of Canada Intelligence and Cyber Defense requirements.
- Attended the Selected Areas in Cryptography Summer School at the University of Ottawa to learn about symmetric key, public key, and post-quantum cryptography.

### Undergraduate Researcher Natural Sciences and Engineering Research Council of Canada

2016

Vancouver, BC

#### Achievements/Tasks

- Conducted independent research on the Min protein system involved in bacterial cell division under the supervision of Dr. Eric Cytrynbaum.
- Simulated cell-scale biochemical reactions to capture the natural stochasticity of a biological cell. (Smoldyn)
- Employed numerical methods to solve a system of partial differential equations that described the biochemical reactions occurring in the cell. (MATLAB/GNU Octave)

## EDUCATION

### PhD - Mathematics University of Toronto

2018 - Present

Toronto, ON

### MSc - Mathematics University of Toronto

2017 - 2018

Toronto, ON

### BSc - Honours Physics and Mathematics University of British Columbia

2013 - 2017

Vancouver, BC

## GENERAL SKILLS

Machine Learning

Data Analysis

Deep Learning

Data Structures & Algorithms

Teamwork

## TECHNICAL SKILLS

### Programming Languages:

Python, MATLAB, R, SQL

### Operating Systems:

Windows, MacOS, Linux

### Other Software/Tools

Git, Scikit-learn, Matplotlib, TensorFlow, Jupyter, Excel

## INTERESTS



Artificial Intelligence



Reading



Science



Sports