

# KYLE BOWER

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## EDUCATION

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<b>University of Toronto</b> <i>Doctor of Philosophy, Mathematics</i>	Sep 2018 – May 2023
<b>University of Toronto</b> <i>Master of Science, Mathematics</i>	Sep 2017 – Aug 2018
<b>University of British Columbia</b> <i>Bachelor of Science, Honours Physics and Mathematics</i>	Sep 2013 – Apr 2017

## WORK EXPERIENCE

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<b>Head Graduate Teaching Assistant</b> <i>University of Toronto</i>	Sep 2017 – Present <i>Toronto, ON</i>
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- Developed a script to automatically assign 1,500+ students to tutorial sections. (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.

<b>Cryptanalyst Summer Intern</b> <i>Communications Security Establishment</i>	May 2017 – Aug 2017 <i>Ottawa, ON</i>
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- 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.

<b>Undergraduate Student Researcher</b> <i>Natural Sciences and Engineering Research Council of Canada</i>	May 2016 – Aug 2016 <i>Vancouver, BC</i>
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- 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)

<b>Undergraduate Teaching Assistant</b> <i>University of British Columbia</i>	Sep 2015 – Apr 2017 <i>Vancouver, BC</i>
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- Invigilated exams and graded tests for undergraduate math courses.

<b>Lifeguard/Swim Instructor</b> <i>City of Richmond</i>	Nov 2013 – Apr 2017 <i>Richmond, BC</i>
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- Supervised patrons to ensure a safe and enjoyable aquatic environment.
- Taught swimming and water safety to students of all ages and abilities.

## TECHNICAL SKILLS

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Experience with Python, MATLAB, LaTeX, UNIX, Linux, GitHub.