# Kayman Brusse

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#### **EDUCATION**

# Master of Science, Computer Science

Toronto, ON

University of Toronto

Sept. 2019 – Apr. 2021 (Expected)

Research Area: Theory of Distributed Computing

### Bachelor of Science, Honours

Toronto, ON

University of Toronto; GPA: 3.80

Sept. 2014 – Apr. 2019

Specialist in Computer Science (Theory), Major in Mathematics

### EXPERIENCE

## Department of Computer Science, University of Toronto

Toronto, ON

Graduate Researcher

Sept. 2019 - Present

- Conducted novel research in theoretical distributed computing, focusing on algorithms and lower-bounds for asynchronous shared-memory systems.
- Worked both independently and with collaborators to identify abstract research problems, develop creative solutions, and communicate new technical ideas to others in the computer science community.

# Flipp Corporation

Toronto, ON

Software Engineer

May 2017 - Apr. 2018

- Built and maintained a suite of tools for data analytics and reporting, providing metrics for marketing attribution and ROI to Flipp's partners, including some of North America's largest retailers.
- Worked with React/Redux and Ruby on Rails to develop a web-app for self-service data analytics. Lead the technical re-design of the application's most popular data visualization, which facilitated the implementation of many highly requested features.
- Built the back-end of a new report generation system. Automated the workflow for failure recovery, which eliminated the need for developer intervention while increasing visibility into errors.
- Took complete ownership of a legacy reporting project, adding bug fixes, and troubleshooting time-sensitive issues. Worked with stakeholders to migrate users onto newer systems and maintain strict customer SLAs.

## Department of Computer Science, University of Toronto

Toronto, ON

Undergraduate Research Intern

Summer 2018

- Researched new models for community structure inside of online forums. Identified metrics that could be used to rank communities based on potential for future success.
- Worked with Python and Pandas to analyse historic data from real online forums. Collaborated with experts in industry to verify correlations between community structure and user engagement.

### Department of Computer Science, University of Toronto

Toronto, ON

Teaching Assistant

Winter 2017, Sept. 2018 - Present

- Lead tutorials for groups of ~20 students, lecturing on topics such as algorithm design and data structures. Emphasised helping students develop an interest in theoretical aspects of computer science.
- Worked in the CS help-center, working 1-on-1 with students to answer questions. Explained complex ideas in the manner best suited to the learning style of each student.

### **RBC** Capital Markets

Toronto, ON

Technical Systems Analyst (Co-op)

Summer 2016

- Worked in Java to develop applications for supporting a Canadian ETF market making system.
- Built a self-service web tool for answering queries about ETF basket composition, saving 30 mins of developer time per day and improving trader workflows.

#### Programming Skills

Languages: Python, Typescript, Ruby, SQL Technologies: Rails, React.js, Git, Unix, Jupyter Notebook