

Education

- 2018 - 2020 **Master's in mathematics**, *University of Montr al*.
(currently attending)
- Master's thesis : The game of cops and robbers of various graph classes
 - Supervisors : Ge a Hahn (Department of Computer Science and Operations Research) and Ben Seamone (Department of Computer Science and Operations Research and Dawson College)
- 2015 - 2018 **Bachelor's in pure and applied mathematics**, *University of Montr al*.

Work experience

- Fall 2020 **Lecturer**, *University of Montr al*.
◦ Course : Symbolic calculation and applications (MAT1680)
- Summer 2020 **Data science software development intern**, *Genetec Inc.*
- 2017 - 2019 **Teaching assistant**, *University of Montreal*.
- Summer 2017 **Research intern**, *University of Montreal*.

Technical expertise

- Advanced knowledge: Wolfram Language (Mathematica), Java
- Some experience: Julia, C++, MATLAB, HTML, LaTeX, R, Python

Prizes and scholarships (by date of results)

- Fall 2018 **Georges-Baril Prize**, *Faculty of arts and sciences (University of Montreal)*.
- Fall 2018 **Jean-Maranda Prize**, *Department of Mathematics and Statistics (University of Montreal)*.
- Winter 2018 **Canada Graduate Scholarship - Master's**, *Natural Sciences and Engineering Research Council (NSERC)*.
- Winter 2018 **Master's research scholarship (B1X)**, *Fonds de recherche du Qu bec - Nature et technologies (FRQNT)*.
- Summer 2017 **Undergraduate Student Research Award**, *Natural Sciences and Engineering Research Council (NSERC)*.

Publications (available on my website)

Submitted

J r mie Turcotte and Samuel Yvon. 4-cop-win graphs have at least 19 vertices. *Submitted*, 2020.

J r mie Turcotte. Cops and robbers on $2K_2$ -free graphs. *Submitted*, 2020.

Peter Bradshaw, Seyyed Aliasghar Hosseini, and J r mie Turcotte. Cops and robbers on directed and undirected abelian Cayley graphs. *Submitted*, 2019.

Accepted

Paul M. Gauthier, Thomas Ransford, Simon St-Amant, and J r mie Turcotte. Approximation by random complex polynomials and random rational functions. *Annales Polonici Mathematici* 123, pages 267–294, 2019.

Programming projects

- 2020 **Graph merging algorithm**, *Designing and implementing an algorithm used in a computer-assisted proof in the article "4-cop-win graphs have at least 19 vertices"*.
- Fall 2018 **Dynamical systems class project**, *Implementation of algorithm to reverse ϵ -machines in Mathematica*.
- Winter 2018 **Clubmath website**, *Redesign of the University of Montreal mathematics club website*.
- Winter 2016 **ConUHacks**, *Software to parallelize mathematical calculations with the GMP library over a cluster with SSH*.
- Winter 2015 **Chess app**, *C gep final project, Android app with Bluetooth connection and basic minimax algorithm*.
- 2014-2015 **Robotics team**, *Main programmer of Bois-de-Boulogne robotics team (2014-2015), 2015 winning robot of CRC robotics and winner of the programming competition*.