

Federico Mora

federicoaureliano.github.io

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RESEARCH INTERESTS

I am interested in applied logic, programming languages, and verification.

EDUCATION

- | | |
|---------|---|
| Ongoing | Ph.D. Computer Science
Advised by Sanjit A. Seshia
University of California, Berkeley |
| 2018 | M.Sc. Computer Science
Advised by Marsha Chechik
University of Toronto |
| 2016 | B.Sc. Computer Science and Mathematics
First Class Honours with Distinction
Mount Allison University |

CONFERENCE RESEARCH PAPERS

- [1] N. Feng, **F. Mora**, V. Hui, and M. Chechik, “Scaling Client-Specific Equivalence Checking via Impact Boundary Search,” *IEEE/ACM International Conference on Automated Software Engineering (ASE)*, 2020.
- [4] **F. Mora**, Y. Li, J. Rubin, and M. Chechik, “Client-specific Equivalence Checking,” *IEEE/ACM International Conference on Automated Software Engineering (ASE)*, 2018.

WORKSHOP AND SHORT PAPERS

- [2] **F. Mora**, K. Cheang, E. Polgreen, and S. Seshia, “Synthesis in Uclid5,” *Workshop on Synthesis (SYNT)*, 2020.
- [3] J. Scott, **F. Mora**, and V. Ganesh, “BanditFuzz: A Reinforcement-Learning based Performance Fuzzer for SMT Solvers,” *International Workshop on Satisfiability Modulo Theories (SMT)*, 2020.
- [5] D. Blotsky, **F. Mora**, M. Berzish, Y. Zheng, I. Kabir, and V. Ganesh, “StringFuzz: A Fuzzer for String Solvers,” *International Conference on Computer Aided Verification (CAV)*, 2018.

RESEARCH POSITIONS

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| 2020 | Applied Scientist Intern, Amazon
AWS Automated Reasoning Group
Supervised by Ankush Desai |
| 2017 | Research Intern, General Motors
Electronic Control Systems Lab
Supervised by Ramesh S |
| 2015-16 | Research Assistant, University of Saskatchewan
Numerical Simulation Lab
Supervised by Raymond Spiteri |
| 2014-15 | Research Assistant, Mount Allison University
Entity Attribute Sketch Implementation Kit (EASIK)
Supervised by Robert Rosebrugh |

TEACHING POSITIONS

2018	Head Teaching Assistant, University of Toronto CSC 410: Software Testing and Verification
2016-18	Teaching Assistant, University of Toronto CSC 324: Principles of Programming Languages CSC 384: Introduction to Artificial Intelligence (2) CSC 410: Software Testing and Verification
2015-16	Teaching Assistant, Mount Allison University COMP 1631: Introduction to Computer Science

PROFESSIONAL SERVICE

2020	Organizer Berkeley Programming Systems Summer Seminar Series
2019	Volunteer Waterloo Machine Learning, Verification, and Security Workshop
2017-19	External Reviewer Automated Software Engineering (ASE '17, '18, '19) Computer Aided Verification (CAV '18) International Joint Conference on Automated Reasoning (IJCAR '18) Symposium on the Foundations of Software Engineering (FSE '17)

MENTORING

Nikhil Pimpalkhare	“Dynamic Algorithm Selection for SMT” In submission to the ASE '20 Undergraduate Student Research Competition
Murad Akhundov	“Expediting Verification of Assertions in Loops by Isolation” Winner of the POPL '20 Undergraduate Student Research Competition

AWARDS AND DISTINCTIONS

2018	C. C. Gotlieb (Kelly) Graduate Fellowship
2017	Alfred B. Lehman Graduate Scholarship
2015-16	Allison (A.F.D) Calvert Memorial Award
2012-15	R.G.G Wilkinson Scholarship
2015	3rd Place Presentation, Science Atlantic Computer Science Conference
2014	4th Place Presentation, Science Atlantic Computer Science Conference
2011-14	Dean's List Standing
2011-12	Governor Thomas Carleton Scholarship

SUMMER SCHOOLS AND WORKSHOPS ATTENDED

July 2018 Oxford, UK	Verification and Deduction Mentoring Workshop Awarded 2018 Federated Logic Conference (FLoC '18) Travel Stipend to attend
July 2018 Manchester, UK	International Summer School on SAT, SMT, and Automated Reasoning Awarded SAT/SMT/AR Summer School Grant to attend

NON-ACADEMIC

Languages	English (native), Spanish (native), and French (basic).
Certificates	Canadian Soccer Association community coaching: “Active Start” (ages 4-6), “Fundamentals” (ages 6-9), and “Learning to Train” (ages 8-12).
Awards	Canadian Interuniversity Sport Academic All-Canadian (4); Jack Drover Athletics Award (2); David MacArel MacAulay Award (2); Mount Allison men’s varsity soccer team captain (2); Soccer New Brunswick Male Bursary Award (1); and New Brunswick provincial soccer team captain (1).