

First Committee Meeting

Progress Report

Jason Balaci

McMaster University

Oct. 21st, 2021

Table of Contents

1 Introduction

2 Project

- Drasil
- Goal #1: Typed Expression Language
- Goal #2: Model Discrimination – “ModelKinds”

3 References

Table of Contents

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Who am I?

- I am **Jason Balaci**



Me, Fall 2019

Who am I?

- I am **Jason Balaci**
- Graduate of *McMaster University*, holding...



Me, Fall 2019

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- I am **Jason Balaci**
- Graduate of *McMaster University*, holding...
 - Hons. Actuarial and Financial Mathematics (B.Sc.)



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- I am **Jason Balaci**
- Graduate of *McMaster University*, holding...
 - Hons. Actuarial and Financial Mathematics (B.Sc.)
 - Minor in Computer Science



Me, Fall 2019

Who am I?

- I am **Jason Balaci**
- Graduate of *McMaster University*, holding...
 - Hons. Actuarial and Financial Mathematics (B.Sc.)
 - Minor in Computer Science
- Currently pursuing a thesis-based Master's of Computer Science (M.Sc) at *McMaster University*, under the supervision of **Dr. Jacques Carette**



Me, Fall 2019

Overview of Progression Towards C.S. M.Sc.

Course-related progression

- I'm required to complete¹:

¹https://academiccalendars.romcmaster.ca/preview_program.php?catoid=45&poid=23470&returnto=9166

²http://www.cas.mcmaster.ca/cas/0files/reg_master_cs_2019a.pdf

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- I'm required to complete¹:
 - One (1) "Software" course

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- I'm required to complete¹:
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 - One "Theory" course, and two "Systems" courses
- I've completed:
 - CAS 701 "Logic & Discrete Mathematics" - Theory course, Fall 2020
 - CAS 761 "Generative Programming" - Software course, Fall 2020
 - CAS 763 "Certified Programming with Dependent Types" - Theory & Software course, Winter 2021
 - COMPSCI 6TB3 "Syntax-Based Tools and Compilers" - Systems course, Winter 2021

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 - COMPSCI 6TB3 "Syntax-Based Tools and Compilers" - Systems course, Winter 2021
- Together, the courses completed satisfies the "Courses Requirement" as mentioned in the academic calendar¹ and the "Regulations for the Computer Science M.Sc. Program" document².

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Overview of Progression Towards C.S. M.Sc.

Thesis/research-related Progression

- Conducted “full-time” research for at least 1 full semester (Spring/Summer 2021), and “part-time” research during courses.

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- Continuing to research “full-time”.

Overview of Progression Towards C.S. M.Sc.

Thesis/research-related Progression

- Conducted “full-time” research for at least 1 full semester (Spring/Summer 2021), and “part-time” research during courses.
- Continuing to research “full-time”.
- Attended a thesis defence to learn about what to expect from a thesis defence meeting (and learn about their research).

Overview of Progression Towards C.S. M.Sc.

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- Continuing to research “full-time”.
- Attended a thesis defence to learn about what to expect from a thesis defence meeting (and learn about their research).
- Supervisory committee is formed, and we’re currently having our first supervisory committee.
 - *Supervisor:* Dr. Jacques Carette
 - Dr. Spencer Smith
 - Dr. Wolfram Kahl

Table of Contents

1 Introduction

2 Project

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What is Drasil?

- Drasil is...



Drasil's Logo

Where will I be contributing?

Table of Contents

1 Introduction

2 Project

- Drasil
- Goal #1: Typed Expression Language
- Goal #2: Model Discrimination – “ModelKinds”

3 References

- Carette, Jacques, Oleg Kiselyov, and Chung-chieh Shan. “Finally tagless, partially evaluated: Tagless staged interpreters for simpler typed languages.” *Journal of Functional Programming* 19.5 (2009): 509.