

# First Committee Meeting

## Progress Report

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McMaster University

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

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- Jason Balaci



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



# Who am I?

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



# Overview of Progression towards Master's of Computer Science (M.Sc.)

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- These “variants” may be records, or the unit type (“()”).
- An instance of a DUT may take on the form of **only one** of it’s variants.
- They are often found in functional programming languages, where they are usually known as **Algebraic Data Types** (ADTs).

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- Instantiation in our implementation,  
a := Cons(1, Cons(2, Cons(3, Nil())))  
b := Red()

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    [default nothing]  
}
```

**Cover your cases!**

If you create a non-exhaustive case statement, the compiler will warn you.

- 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.