

# ECE326

## PROGRAMMING LANGUAGES

### **Lecture 37 : Final Review**

Kuei (Jack) Sun

ECE

University of Toronto

Fall 2019

# Final Exam

- Monday, December 16<sup>th</sup>
  - 9:30am - 12:00pm
  - BA1180/BA1190
- Cheat sheet is allowed
  - Double-sided
  - Letter-sized paper
  - No restriction
- 9 Questions
  - With sub-questions

# Breakdown

- True or False
- Multiple Choices
- Short Answers
  - With written responses
- Will cover entire course content
- 50% pre-midterm, 50% post-midterm

# Breakdown

- Multiple Inheritance
  - Structure layout
- Template Metaprogramming
  - Variadic template
- Reflective Programming
  - Descriptor
  - Metaclass
  - Decorator

# Breakdown

- Rust Programming
  - Ownership and Lifetime
  - Traits
- Concurrent Programming
- Iterators
  - Rust Iterator Adapters
  - Generators
  - Coroutines

# Hints and Advice

- Emphasis on assignment 3 and 4
  - Strong understanding will be very helpful
- Understand the conceptual topics
  - Type systems
  - Language features
- Learn how to apply them in different settings
  - E.g. Is it useful to have generators for Rust?
  - E.g. How can we add generators to Rust?