

Ming-Ho Yee

github.com/mhyee • mh@mhyee.com • mhyee.com

RESEARCH EXPERIENCE

Research Assistant

Northeastern University

- Graduate studies supervised by Professor Jan Vitek
- Area: programming language design and implementation

Boston MA

Sep 2016 – present

Research Assistant

University of Waterloo

- Graduate studies supervised by Professor Ondřej Lhoták
- Area: static program analysis, compilers, programming languages

Waterloo ON

Sep 2014 – Aug 2016

Capstone Design Project

University of Waterloo

- Course work in a team of four undergraduate students, supervised by Professor Derek Rayside
- Project: [designing, implementing, and evaluating improvements for the guided improvement algorithm](#)

Waterloo ON

Sep 2012 – Apr 2014

Undergraduate Research Assistant

University of Waterloo

Waterloo ON

Sep – Dec 2012

Research Assistant and Developer

University of Waterloo

Waterloo ON

May – Aug 2012

WORK EXPERIENCE

Software Development Engineering Intern

Microsoft

- Implemented a partial prototype of concepts lite in the Visual C++ compiler

Redmond WA

May – Jul 2014

Software Development Engineering Intern

Microsoft

- Implemented user-defined literals for the Visual C++ compiler

Redmond WA

Sep – Dec 2013

Software Development Engineering Intern

Microsoft

- Prototyped, developed, and evaluated a heap memory collection tool for .NET applications

Redmond WA

Jan – Apr 2013

Developer

Engagio (formerly Eqentia)

- Along with a senior developer, designed, built, and launched [Engagio](#), “the universal commenting inbox”
- Optimized the background task queuing system to dynamically prioritize fetch tasks

Toronto ON

Sep – Dec 2011

Developer

Eqentia

- Designed and implemented a feature for users to add content by sending emails
- Co-led the implementation of the new front-end interface redesign

Toronto ON

Jan – Apr 2011

Software Development Research Intern

Genesys Telecommunications Laboratories

- Developed a proof-of-concept speech analytics application to improve customer experience at call centres

Markham ON

May – Aug 2010

Junior Developer

Robarts Research Institute

- Implemented a new module for pre-existing data analysis software, using IDL (Interactive Data Language)
- [Examined MRI spectroscopy data with the new module to research drug treatments for Alzheimer’s Disease](#)

London ON

Jul – Aug 2008

PUBLICATIONS

- M. Madsen, M.-H. Yee, O. Lhoták, [From Datalog to Flix: A Declarative Language for Fixed Points on Lattices](#), **PLDI 2016**, Jun 2016
- M. Safa, M.-H. Yee, D. Rayside, C. T. Haas, [Optimizing Contractor Selection for Construction Packages in Capital Projects](#), **ASCE J. Comput. Civ. Eng.**, Jan 2016
- E. Zulkoski, C. Kleynhans, M.-H. Yee, D. Rayside, K. Czarnecki, [Optimizing Alloy for Multi-objective Software Product Line Configuration](#), **ABZ 2014**, Jun 2014

TECHNICAL SKILLS

- Experienced with C, C++, Scala, Java, and Ruby
- Familiar with C#, Perl, x86 and MIPS assembly, and JVM bytecode
- Some knowledge of Racket, OCaml, Haskell, ARM assembly, and LLVM IR
- Comfortable with Linux, OS X, and Windows environments

TEACHING EXPERIENCE

Teaching Assistant

University of Waterloo

- [CS 444: Compiler Construction](#) (Winter 2016)
- [CS 241E: Foundations of Sequential Programs, Enriched](#) (Fall 2015)
- [CS 241: Foundations of Sequential Programs](#) (Spring 2015, Spring 2016)

Waterloo ON

May 2015 – Aug 2016

ACTIVITIES

- Past student representative on the Software Engineering Curriculum Committee
- Past academic representative for the Software Engineering Class of 2014
- Member, tournament director, and past president for the Quizbowl Club

AWARDS

- NSERC Postgraduate Scholarship - Doctoral *2016 – 2019*
- Graduate Fellowship *2016 – 2017*
- NSERC Canada Graduate Scholarship - Master's *2015 – 2016*
- President's Graduate Scholarship (x2) *2014 – 2015, 2015 – 2016*
- Ontario Graduate Scholarship *2014 – 2015*
- NSERC Canada Graduate Scholarship - Master's (declined) *2014*
- Ontario Professional Engineers Foundation Medal for Academic Achievement *Jun 2014*
- Software Engineering Capstone Design Project Symposium, First Place *Mar 2014*
- NSERC Undergraduate Student Research Award *May – Aug 2012*
- President's Research Award *May – Aug 2012*
- Scotiabank Software Engineering Entrance Scholarship *2009 – 2014*

EDUCATION

Ph.D. Student

Northeastern University

Boston MA

Sep 2016 – present

Candidate for Master of Mathematics in Computer Science

University of Waterloo

Waterloo ON

Jun 2017 (expected)

- Thesis: [Implementing a Functional Language for Flix](#) (completed Sep 2016)

Bachelor of Software Engineering

University of Waterloo

Waterloo ON

Jun 2014

- With Distinction – Dean's Honours List