LILY BRYANT

labryant@cs.ubc.ca | cs.ubc.ca/~labryant

RESEARCH INTERESTS

Type-preserving compilation, compiler correctness, dependent type theory, language semantics

EDUCATION

MSc, Computer Science, *University of British Columbia* – 94% GPA

Sep 2019 – Present | Vancouver, BC

- Thesis focus: *Compilation as Multi-language Semantics*
    Supervised by Prof. William J. Bowman

- Selected coursework: *Compiler Theory, Programming Language Principles, Functional and Logic Programming*

BSc Hons. With Distinction, Computer Science, *University of Victoria* – 96% GPA

Sep 2014 – Aug 2019 | Victoria, BC

- Thesis: *Melody: A User-friendly Programming Language for Music Design and Audio Output*
    Supervised by Prof. Jason Corless

- Selected coursework: *Programming Languages, Operating Systems, Elementary Formal Logic,*
    Theoretical Logic, Philosophy of Mathematics

EXPERIENCE

Graduate Teaching/Research Assistant, *University of British Columbia*

Sep 2019 – Present | Vancouver, BC

- Introduction to Compiler Construction – CPSC 411   Spring 2020, Spring 2021, Course Dev. (ongoing)
    Incremental implementation and extension of a compiler from Racket subset to x86 Assembly [Racket]

- Definition of Programming Languages – CPSC 311   Fall 2019, Fall 2020
    Syntax and semantics, implementation of functional and OOP languages [Racket]

Academic Assistant, *University of Victoria*

May 2018 – Aug 2019 | Victoria, BC

- Foundations of Computer Science – CSC 320   Fall 2018
    Computational complexity theory, automata theory, decidability [theory]

- Algorithms and Data Structures I and II – CSC 225, 226   Summer 2018, Spring + Summer 2019
    Intermediate algorithmic design and analysis, graph theory, advanced data structures [Java]

- Fundamentals of Programming I and II – CSC 110, 115   Fall 2018, Spring + Summer 2019
    Introductory OOP and data structures [Python, Java]

Software Developer, Co-op, *Delta-X Research*

Apr 2018 – Aug 2018 | Victoria, BC

- Working in Python, assisted in development of market-leading, cloud-based web application providing management and analysis of test data for high-voltage electrical apparatus

SERVICE

- ICFP 2021 – Organizing Committee (Student Volunteer Co-chair), Virtualization Committee
- ICFP 2020 – Student Volunteer

AWARDS AND SCHOLARSHIPS

UBC CS Graduate Teaching Assistant Award	2021
BC Completion Grant – $1250	2017
Clara Evelyn Wilson Scholarship – $4000	2016/2017
Association of Professional Engineers of BC Bursary – $835	2016
University of Victoria Entrance Scholarship – $3000	2014
Numerous academic achievement awards grades 9-12 – $2000 total	2014

Last Updated: 26/08/2021