# Paulette Koronkevich

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### Education

August 2021 University of British Columbia, Vancouver, BC, Canada

Software Practices Lab *M.Sc in Computer Science* 

May 2019 Indiana University, Bloomington, Indiana, USA

School of Informatics, Computing, and Engineering

Bachelor's of Science in Computer Science MINORS: Mathematics, Slavic Studies

### Honors & Awards

UBC CS Merit Scholarship

NSF Graduate Research Fellowship

2015-2019 Indiana University Cox Scholarship

given to ~40 incoming IU students for high academic performance along with a parttime job, and are required to maintain this throughout their undergraduate degree.

School of Informatics, Computing, and Engineering Dean's List

given for maintaining a GPA above 3.7.

Second place at Systems, Programming, Languages, and Applications: Software

for Humanity (SPLASH 2018) Student Research Competition

Cornell, Maryland, and Max Planck Pre-Doctoral Research School (CMMRS) Travel

Award

2017

First place at the SICE Research & Projects Symposium

presented my compilers course project: One Weird Trick to Compile Call/cc.

Programming Languages Mentoring Workshop (PLMW) at the International Con-

ference on Functional Programming Travel Award

### **Presentations**

The ANF Translation Preserves Dependent Types up to Extensional Equality
Presented at: Languages, Systems, and Data (LSD) Seminar at UC Santa Cruz.

Reigniting Fuse, an Online Partial Evaluator for Scheme

Presented at: Scheme Workshop at the International Conference on Functional Programming (ICFP).

Obsidian in the Rough: A Case Study Evaluation of a New Blockchain Programming Language

Presented at: Midwest Programming Languages Summit (MWPLS); Systems, Programming, Languages, and Applications: Software for Humanity (SPLASH) Student Research Competition.

## **Research Experience**

Undergraduate thesis with Professor Sam Tobin-Hochstadt, developing a partial evaluator for linklets in the Racket language.

#### Summ. 2018 Carnegie Mellon University, Pittsburgh, Pennsylvania

- Conducted a case study evaluation of a blockchain programming language, Obsidian.
- Contributed to a new feature of the language as a result of this evaluation.
- Wrote and presented the work with a student research competition submission and poster.

#### Spring 2018 Indiana University, Bloomington, Indiana

- Contributed to a current research compiler, Gibbon, which optimizes traversals over tree data structures.
- Extended the current language from a first order language to a higher order language.
- Wrote a final report summarizing the work, citing the primary resources found and used.

## **Work Experience**

Summ. 2019 **Galois Inc**, Portland, Oregon Software Engineering/Research Intern

- Built a system which generated random tests for an API based on a high-level specification.
- Developed a prototype of a typechecker for an advanced type system.

#### 2016-2019 Indiana University, Bloomington, Indiana

IU Peer Coach

- Assisted all students with registering, scheduling, and planning classes.
- Held 8-10 appointment and drop-in hours to provide support for students one on one.

• Organized degree-planning workshops to help inform and prepare incoming students.

### Summ. 2017 JPMorgan Chase & Co, Chicago, Illinois

Tech Analyst Intern

- Learned about various software development tools and the SDLC.
- Refactored an existing application to prepare it for cloud deployment.
- Recreated the user interface into a portable widget.

# **Teaching**

Fall 2020	Programming Languages (graduate course)
Spring 2019	Introduction to Computer Science
Fall 2018	Programming Languages & Mapping Your Future
Spring 2018	Dependent Types
Fall 2017	Programming Languages
Spring 2017	Introduction to Computer Science, making instructional videos.
Fall 2016	Introduction to Computer Science
Spring 2016	Introduction to Computer Science

### **Service**

2020-2021	President of UBC Computer Science Graduate Student Association.
2019-2020	Events director for UBC Women in Computer Science (WiCS).
2018-2020	Student Volunteer at International Conference on Functional Programming (ICFP)
	2018-2019, Programming Language Design and Implementation (PLDI) 2019-2020,
	and Principle of Programming Languages (POPL) 2020-2021.
2019	VP Social for UBC Computer Science Graduate Student Association.
2018	Organizational Committee for Opportunities for Undergraduate Research in Com-
	puter Science (OurCS), held at Indiana University in 2018.
	Also served on a student research panel.

# **Skills**

Racket • Agda • Haskell • Java

FOREIGN LANGUAGES

Russian