

# Carl J. Factora

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## Education

### Indiana University

*Computer Science/English Literature, GPA 3.42*

Coursework included compiler design, programming language theory, and functional programming.

**Bloomington, IN**

*Aug 2012–May 2016*

### The Recurse Center NYC

*Hacker School*

Learned web development techniques, pair programming practices, and contributed to open source projects.

**New York, NY**

*February 2017–Current*

## Experience

### Computer Science Instructor

*Indiana University*

Courses included topics related to functional programming and programming language theory. Contributed course material and taught labs/lectures. Associate/undergraduate instructor for:

- CSCI-B490: “Advanced Functional Programming (FP)” - FP concepts and Haskell design techniques
- CSCI-P423/B523: “Compiler Implementation” - Incremental compiler design in Racket
- CSCI-C311/B532: “Programming Language Concepts” - Systematic approach to programming languages
- CSCI-C211: “Introduction to Computer Science”

**Bloomington, IN**

*Jan 2014–Dec 2016*

### Undergraduate Researcher

*Daniel P. Friedman*

Research topics included the Calculus of Constructions, Martin-Löf Type Theory, theorem provers and dependent types. Influenced future course material for CSCI-C311 and CSCI-B629.

**Bloomington, IN**

*May 2015–Jul 2015*

## Projects.....

### Project Lamp

*Interactive Online Book*

Author and co-creator of an online interactive book teaching functional programming in PureScript. Leveraged the utility of a static-site generator, Jekyll, to allow the seamless creation of book content.

**New York, NY**

*Feb 2017–Current*

### Hermes

*Speed Reader App*

Implemented in Elm. Designed to work with format-rich websites and documents by allowing user-configurable behavior for specially-formatted text (i.e., headers, math formulas, code examples etc.).

**New York, NY**

*April 2017–Current*

### Essentials of Compilation: An Incremental Approach

*Compiler Design Textbook*

Contributed to a compiler textbook by Jeremy Siek used for course material in CSCI-P423/B523.

**Bloomington, IN**

*Oct 2015–May 2016*

### Introduction to Dependent Types

*Indiana University Logic Seminar*

Presented at Indiana University’s Logic Seminar on dependent types and the Calculus of Constructions.

**Bloomington, IN**

*Oct 2015*

## Proficiencies

Haskell, Elm, PureScript, Agda, Racket/Scheme, Python, C, Java