

# Carl J. Factora

☎ (812) 340 9240 • ✉ cfactora93@gmail.com  
📁 ivanthetricourne.github.io

## Experience

---

### Software Developer

New York, NY

*Droit Financial Technologies, LLC*

*Aug 2017-Present*

- Designed a low-latency decision engine API used for assuring compliance to financial regulatory laws
- Leveraged Clojure to design domain-specific languages and compilers
- Refactored core decision engine data pipeline to improve overall performance by over **40%**
- Led 3 engineering teams responsible for maintaining and developing core company products
- Contributed to formalizing working practices and processes

### Associate Instructor

Bloomington, IN

*Indiana University*

*Aug 2016-Dec 2016*

- Lecturer on functional programming concepts and Haskell design techniques
- Course ID: CSCI-B490: "Advanced Functional Programming"

## Projects

---

### Project Lamp

*Interactive Online Book*

- Authored an online interactive book for teaching functional programming concepts
- Leveraged a static-site generator (Jekyll) for seamless creation of book content

### Essentials of Compilation: An Incremental Approach

*Compiler Design Textbook*

- Contributed to an open source compiler textbook by Jeremy Siek
- Used for university course material in CSCI-P423/B523.

## Education

---

### The Recurse Center

New York, NY

*Hacker School*

*February 2017–May 2017*

Attended a self-directed programming retreat. Learned web development techniques, pair programming practices, and contributed to open source projects.

### Indiana University

Bloomington, IN

*Computer Science/English Literature, GPA 3.42*

*Aug 2012–May 2016*

- Instructed graduate and undergraduate CS courses:
  - CSCI-P423/B523: "Compiler Implementation"
  - CSCI-C311/B532: "Programming Language Concepts"
  - CSCI-C211: "Introduction to Computer Science"
- Undergraduate CS research experience
  - Studied dependent type theory (Martin-Löf) under Daniel P. Friedman
  - Presented at Indiana University's Logic Seminar on dependent types and the Calculus of Constructions

## Proficiencies

---

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