

Ambrose Bonnaire-Sergeant Last update on November 24, 2018

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Summary

I design and implement sophisticated development tools for working programmers. Now that I am completing my Ph.D. thesis on Typed Clojure, I'm looking apply my rigorous training and expertise in industry.

Software Development Experience

Lead Developer for Typed Clojure

2011 — present

- designed and implemented an optional type system for Clojure, written in Clojure
- contributed bug fixes and features in over [2,300 commits](#) (over 380k lines of changes), 160 releases
- provided consulting support for industry usage (CircleCI)
- developed plugins for Vim, Emacs, Lein, and Boot
- crowdfunded over \$50,000 to support development (incl. CircleCI, Walmart Labs, and Cognitect)
- mentored 5 Google Summer of Code students

Software Developer (Remote)

SPARKFUND, May 2017 — February 2018

- enhanced interactive pricing estimation tools using ClojureScript and om.next
- produced internal pricing reports in collaboration with sales team using Clojure and Google Sheets
- parallelized the CI builds of several projects with a migration to CircleCI 2.0 Workflows
- completed company-wide upgrade to a version of Clojure with breaking changes

Other Experience

Research Assistant / Assistant Instructor

INDIANA UNIVERSITY BLOOMINGTON, Fall 2014—present

- published peer reviewed papers about Typed Clojure and [clojure.spec](#)
- taught undergraduates introductory programming and introductory data structures

Education

[Indiana University Bloomington](#)

BLOOMINGTON, INDIANA

Ph.D. in Computer Science

Spring 2019

Master of Science in Computer Science

2017

[University of Western Australia](#)

WESTERN AUSTRALIA, AUSTRALIA

BSc in Computer Science with Honours

2013

Selected Open Source Contributions

[Clojure](#), [ClojureScript](#), [core.match](#)

Selected Talks

[Tool-assisted spec Development](#)

CLOJURE/CONJ 2017

[Practical Optional Types for Clojure](#)

ESOP 2016

[Typed Clojure: From Optional to Gradual Typing](#)

STRANGELOOP 2015

[Typed Clojure in Practice](#)

STRANGELOOP 2014

[Typed Clojure](#)

CLOJURE/CONJ 2012

[Introduction to Logic Programming](#)

CLOJURE/CONJ 2011

Programming languages

Proficient in Clojure. Experience with Java, C, Racket, Coq, and Agda.

Community

- Google Summer of Code Administrator for Clojure (2014-2015)
- organizer of [PL Wonks](#), Indiana University's weekly Programming Languages seminar (2017-)