

**Ambrose Bonnaire-Sergeant** *Last update on April 26, 2019*  
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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-)