

# Ambrose Bonnaire-Sergeant Last update on November 23, 2018

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## Summary

I design and implement sophisticated development tools for working programmers. My main focus has been creating Typed Clojure, an optional type system for Clojure.

While developed in an academic setting, Typed Clojure has seen wide use in industry. My efforts in sustaining this have formed a solid basis for my technical

skills, as well as opportunities to hone my communication skills through dozens of talks, designing three successful crowdfunding campaigns, and experience in leading small teams.

I'm looking to further apply and expand on these lessons by working with teams excited to craft world-class developer experiences.

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## 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)

### Software Intern

SPARKFUND, May 2017 — February 2018

- enhanced tooling for sales team, including monthly pricing reports, and interactive pricing tools
- 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
- worked remotely; used Clojure, ClojureScript, om.next, Google Sheets, Salesforce, Asana, Boot

## Other Experience

### Student Academic Appointee

INDIANA UNIVERSITY BLOOMINGTON, Fall 2014—present

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

## Education

### Indiana University Bloomington

Computer Science Ph.D. (candidate)

Master of Science in Computer Science

BLOOMINGTON, INDIANA

Fall 2014 — Spring 2019 (expected)

2014 — 2017

### University of Western Australia

BSc in Computer Science with Honours

WESTERN AUSTRALIA, AUSTRALIA

2008 — 2013

## Selected Open Source Contributions

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

## Selected Talks

Tool-assisted spec Development ([Video](#))

CLOJURE/CONJ 2017

Practical Optional Types for Clojure ([Slides](#))

ESOP 2016

Typed Clojure in Practice ([Video](#))

STRANGELOOP 2014

Introduction to Logic Programming ([Video](#))

CLOJURE/CONJ 2011

## Skills

Proficient in Clojure. Some experience with Java, C, Racket, Scheme, Coq, and Agda.

## Personal

I live in Bloomington, Indiana and have a US work permit.