

Michael J. Dickens

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San Francisco CA
<http://mdickens.me/>

EDUCATION

Stanford University: BS, Mathematical and Computational Sciences GPA 3.7

Languages: Python, C, Ruby, Haskell, Common Lisp, Java, Emacs Lisp, C++, Clojure

EXPERIENCE

Affirm — Software Engineer 2016–present

- Work with team to develop underwriting framework and back-end data management services
 - Rewrote internal API for accessing/updating bank account data
 - Reduced cost to make loans by 60 basis points
 - Wrote back-end for Affirm's pre-qualification product; provide ongoing support
- Tools: Python

Facebook — Software Engineering Intern 2015

- Wrote pipelines that manage log databases used by product-ranking algorithm
- Tools: PHP, Python, Apache Hive

Gusto — Software Engineering Intern 2014

- Wrote regression analysis to catch errors in payroll payments and increase system reliability
- Received commendation for writing high-quality documentation
- Tools: Ruby on Rails, SQL

Sourcegraph — Software Engineering Intern 2014

- Developed a source code analyzer for Clojure
- Tools: Clojure, Go

PROJECTS

StockStrategy [Haskell] 2013–present

- DSL for backtesting fundamentals-based investing strategies
- Successfully replicated academic findings on value investing and produced novel results

Emacs Extensions [Emacs Lisp] 2012–present

- C/C++ refactoring tools
- Language-agnostic compile/run command
- Intelligent file finder
- Internal company code base navigator

Essays — <http://mdickens.me/> 2007–present

- Topics include philosophy, ethics, math, and programming
- Article about charitable cause prioritization convinced ~10 people to donate a total of ~\$90,000
- Article on The Keyboard Layout Project reached the front page of *Hacker News*

The Keyboard Layout Project [C] 2008–2014

- Simulated annealing algorithm to optimize keyboard layouts
- Customized the program for ~10 clients

Match [Common Lisp] 2013

- Pattern matching library implemented using Lisp metaprogramming

Compiler [C, Common Lisp] 2010–2012

- Implements a new functional, object-oriented programming language
- Includes a source-to-LLVM compiler and a standard library

ACTIVITIES

Stanford Effective Altruism 2012–2016

- Member of organization dedicated to improving the world in the most effective way possible
- In 2014 and 2015, helped raise \$5,000 and \$6,800 respectively for effective charities
- Served as president during summer 2015; organized and led meetings

Hunger Games 2013

- Ranked 6th place out of 440 contestants in game theory competition hosted by Brilliant