KIRA GHANDHI

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EDUCATION

The University of Chicago, Chicago, Illinois
BS Mathematics, BS Computer Science, Expected 2016
GPA 3.25/4.00
Relevant Courses: Honors Calculus, Accelerated Analysis, Honors Algebra, Networks and Distributed Systems, Computational Linguistics, Programming Languages, Advanced Distributed Systems, Discrete, Operating Systems, Algorithms, Functional Programming, Databases, Functional Systems in Haskell, Machine Learning, Security

EXPERIENCE

Sprout Social, Chicago, IL
Platform Engineer (intern then part time) **June 2015 - present**

- Utilized MySQL, Cassandra and Hadoop to cache, aggregate, and analyze social networking data exposed via a python REST API.
- Built upon existing interfaces to and cross-validated data collected from Google+, Google Analytics, Twitter, Facebook, Instagram, and LinkedIn.
- Spearheaded the research, design, implementation, and testing of a new, concurrent interface to Twitter historical data that allows users to track the popularity of keywords over time.
- Built support for a new metric involving polling data from Instagram, storing it in HBase, and aggregating it with MapReduce to store it in Cassandra where it is accessible to the API.

Mission Street Manufacturing, Santa Barbara, CA
Software Engineering Intern **June 2014 - August 2014**

- Developed agile front- and back-end in a cross-functional team for critical user-facing feature that shipped with all 3D printers allowing users to replace printing filament
- Full stack engineer across iOS (Swift), web services (Python/Flask), and embedded hardware (Python running on a Raspberry Pi)
- Wrote unit, functional, and integration tests to cover both new and legacy code
- Documented the changes in design documents and diagrams

Department of Mathematics, University of Chicago, Chicago, IL
VIGRE Course Assistant **October 2013 - June 2014**

- Collected, graded, and promptly returned homework assignments for introductory calculus
- Assigned more than a dozen students of diverse skill levels in informal weekly office hours
- Developed teaching and communication skills

ACTIVITIES

REU in Mathematics, *University of Chicago*, Chicago, IL **Summer 2013**

- Wrote a paper entitled "Khovanov Homology as an Invariant" with guidance from graduate students in mathematics and the professors of the courses (available at http://math.uchicago.edu/~may/REU2013/REUPapers/Ghandhi.pdf)

COSMOS Summer of Mathematics, *UC Davis*, Davis, CA **Summer 2010**

- Wrote a paper entitled "Check Digits" based on individual research (available at http://cosmos.ucdavis.edu/archives/2010/cluster6/Ghandi_Kira.pdf)

PROGRAMMING PROJECTS

- ElmMan, an implementation of Pacman in the functional programming language Elm (compiled to JavaScript, HTML and CSS): https://github.com/kghandhi/pacman.
- Hetris, an implementation of Tetris in Haskell, with the functional reactive programming library Helm: https://github.com/kghandhi/cmsc-22311/tree/master/Tetris
- Projects in C: implemented a fully functional IRC server, mimicked TCP routing (chitcp), built a mini operating system (Pintos), and built a relational database management system accepting a subset of SQL (chidb)