# NATHAN TINDALL

## CONTACT

ntindall@stanford.edu 650.605.7070 linkedin.com/in/ntindall github.com/ntindall nathantindall.com

# **EDUCATION**

#### STANFORD UNIVERSITY

BS IN SYMBOLIC SYSTEMS MS IN COMPUTER SCIENCE Expected 2017 | Stanford, CA Cum. GPA: 3.94 / 4.0

# **COURSEWORK**

#### CS

103: Computability & Complexity

107: Computer Organization

109: Probability

110: Systems Principles

140: Operating Systems

144: Networking Principles

147: Human Computer Interaction

155: Computer & Network Security

161: Algorithmic Design & Analysis

221: Artificial Intelligence

240: Advanced Topics in OS

242: Programming Languages

240H: Functional Systems in Haskell

244: Advanced Networking Topics

245: Database Principles

255: Cryptography

#### **OTHER**

Semantics & Pragmatics • Linear Algebra • Mechanics • Cognitive Neuroscience & Development Music Theory • Computer Generated Sound • SLOrk

# SKILLS

## **PROGRAMMING**

Java • C • C++ • Haskell • LATEX Javascript • Python • Chuck

# **INTERESTS**

Music Composition • Sustainable Food • Being Active • Piano • A Song of Ice and Fire • Functional Programming

## **WORK EXPERIENCE**

#### **BLEND LABS** SOFTWARE ENGINEERING INTERN

June 2016 - Present | San Francisco, CA

 Building a platform for better lending; full stack development on MEAN (MongoDB, Express, AngularJS, Node.js)

#### **COMPUTER SCIENCE DEPARTMENT** CS 107 TEACHING ASSISTANT

March 2016 - June 2016 | Stanford, CA

- Teach sections of CS 107 (intermediate systems programming)
- Maintain general-purpose office hours; grade assignments.

#### CS 198 CS 106A/B Section Leader

September 2015 - March 2016 | Stanford, CA

• Assisted with the introductory programming class at Stanford University by teaching a small, 10-12 student section once a week.

### **RELATEIQ** BACKEND / SYSTEMS ENGINEER, INTERN

June 2015 - August 2015 | Palo Alto, CA

 Worked to improve suggested followups, including architectural changes to Apache Storm required to support high volume of users.

#### STANFORD RESED KAIROS KITCHEN MANAGER

September 2014 - June 2016 | Stanford, CA

• Member of student staff team charged with the day-to-day operations and community building of **Kairos**, a student-housing cooperative on campus.

# RESEARCH

#### **DEPARTMENT OF SYMBOLIC SYSTEMS** RESEARCH ASSISTANT

June 2014 - June 2015 | Stanford, CA

• Worked with **Todd Davies** investigating differences in participation patterns in online and offline media among racial and gender subgroups.

# **PROJECTS**

# NOMADIC HUES AUDIO VISUAL COMPOSITION

Spring 2015-2016 | Stanford Laptop Orchestra | Bing Concert Hall Spring 2016

- Designed / implemented an interactive visual world where performers use their laptop to control a player capable of producing sound.
- Networked bidirectional server-client architecture implemented in ChucK.
- https://github.com/ntindall/CS170/tree/master/nameless

#### **AERGIA** HASKELL DISTRIBUTED KEY VALUE STORE

Winter 2015-2016 | CS 240H final project | Haskell | Team of 3

- Haskell implementation of a distributed in-memory database running on a single coordinating (master) server and any number of worker nodes.
- https://github.com/ntindall/KVStore

#### **POETWRITER** A CONSTRAINT BASED NOVEL TEXT GENERATOR

Autumn 2014-2015 | CS 221 final project | Python | Team of 3

- Performs backtracking search over *n*-gram model, propagating constraints forward as partial solutions are found.
- https://github.com/ntindall/poetwriter

#### GAEITIES 2014 & GAEITIES 2015 COMPOSER AND LYRICIST

November 2014, 2015 | Performed in Memorial Auditorium