# Andrew Gu

andrew@mingbogu.com http://minabogu.com aithub.com/andrewgu12 College Park, MD • Cupertino, CA (408) 666 - 7838

## **Education**

University of Maryland, College Park

**Major:** BS, Computer

Engineering

**Anticipated:** Spring 2018

# Languages

C (Advanced)

Ruby

Java

Python

**Javascript** 

PHP (Proficient)

Y86 Assembly / MIPS / x86

Matlab

OCaml (Beginner)

Prolog

Verilog

C++

## Frameworks/Technologies

Node.js (Advanced)

Ruby on Rails

**jQuery** 

Ember.js

React. | S (Proficient)

Angular.js

Backbone.js

Redis (Beginner)

Elasticsearch

# **Databases**

MySQL MongoDB

PostgreSQL

## **Electronics**

Arduino **PSPICE** 

# **Experience**

#### **Extreme Blue Technical Intern**

May '17 - Present

IBM - Austin, TX

>> Utilizing Watson, Node.js, and machine learning to build a real-time virtual agent for service desk agents.

#### AMP Tutor, CMSC216

Jan. '17 - May '17

University of Maryland, College Park - College Park, MD

- >> Teaching students core concepts related to C, Assembly, and Unix system processes.
- >> Hold office hours to assist with projects and class material.

## Software Developer Intern

Jan. '17 - Feb. '17

Mid-Atlantic Crossroads - College Park, MD

- >> Oversaw all UI and UX changes in redevelopment of application.
- >> Established guidelines for writing maintainable & scalable Javascript and CSS.

#### Research Assistant

Sept. '16 - Dec. '16

UMD Radiation Facilities - College Park, MD

>> Tested new hardware and wrote code samples for new and old equipment to begin development of a controls system for university's linear accelerator. Wrote in C++ and ROOT.

## **Junior Engineer**

Sept. '15 - Jan. '16, June '16 - Aug. '16

FiscalNote - Washington, DC

- >> Built various features and bug fixes with Ember.js on the front end Ruby on Rails as the API.
- >> Wrote Elasticsearch queries to filter out bills from amendments and built UI filters based on the gueries.
- >> Researched, built features, and established guidelines to make app more accessible for visually impaired.
- >> Built a version of FiscalNote for the European Union for our intern hackathon with a team of 5.

## Software Engineering Intern

June '15 - Aug. '15

AppCow - New York City

- >> Developed a recommendation engine using PHP and the 42Matters API to deliver a personalized list of mobile apps.
- >> Rebuilt entire backend API in Node.js and MongoDB in a team of 3.

# **Systems**

Linux (Ubuntu, Arch) OSX Windows

## **Relevant Coursework**

#### Computer Science:

- >> Introduction to Object Oriented Programming I
- >> Introduction to Object Oriented Programming II
- >> Discrete Structures
- >> Introduction to Computer Systems
- >> Organization of Programming Languages
- >> Algorithms
- >> Computer and Network Security

## **Electrical Engineering:**

- >> Electric Circuits
- >> Elements of Discrete Signal Analysis
- >> Digital Logic Design
- >> Fundamental Digital Circuits and Systems Lab
- >> Analog and Digital Electronics
- >> Electronic Circuit Design Laboratory
- >> Signal and System Theory
- >> Computer Organization
- >> Engineering Probability

#### Math:

- >> Calculus III
- >> Differential Equations for Scientists and Engineers
- >> Linear Algebra for Scientists and Engineers