Andrew Gu

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College Park, MD • Cupertino, CA

Education

University of Maryland,
College Park
Major: Computer Engineering
Class: Fall 2017
GPA: 3.213

Languages

Javascript
Ruby
OCaml
Prolog
Java
C / C++
Python
PHP
Y86 Assembly / MIPS / x86
Verilog
Matlab
HTML5 / CSS3

Frameworks/Technologies

Node.js
Ruby on Rails
jQuery
Ember.js
React.js
Angular.js
Backbone.js
Redis
Elasticsearch
Git

Databases

MySQL
MongoDB
PostgreSQL

Electronics

Arduino
PSPICE

Experience

AMP Tutor, CMSC216
Jan. '17 - Present
University of Maryland, College Park
>> Hold office hours to help students with the course.

Software Developer Intern
Jan. '17 - Feb. '17
Mid-Atlantic Crossroads
>> Refactored and built new features with Javascript on the frontend and Java on the back.
>> In charge of revamping application's UI and UX.
>> Established guidelines for writing maintainable & scalable Javascript and CSS.

Research Assistant
Sept. '16 - Dec. '16
UMD Radiation Facilities
>> Using C++ and CERN's ROOT library to build a controls system for the linear accelerator.

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 queries.
>> Worked on making the app more accessible for visually impaired by adding context to images, links, and icons. Also applied ARIA attributes as necessary.
>> Built various features that involved exporting data to CSV and XLS formats.
>> Worked on a team of 5 to build a version of FiscalNote for the European Union for our intern hackathon.

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.
>> Worked in a team of 3 to rebuild entire backend API in Node.js and MongoDB.

Software Developer
June '15 - Aug. '15
Fusion Ventures - Maryland
>> Built a frontend for Fusion Venture's Beat the Brain challenge that allowed users to submit trades to compete against each other and the internal algorithm.
>> Worked on integrating the E-Trade API in PHP to allow users to automatically submit trades to the stock market.

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
>> Digital Computer Design

Math:
>> Calculus III
>> Differential Equations for Scientists and Engineers
>> Linear Algebra for Scientists and Engineers