# **Harish Shanker**

shanker.harish@gmail.com •• (510) 364-4011 •• harishshanker.com •• github.com/hshank

#### **Education**

# University of California, Berkeley

(August 2012 - May 2016)

# BS: Electrical Engineering and Computer Science (EECS)

Coursework: Machine Learning, Artificial Intelligence, Data Science, Advanced Signals and Systems, Databases, Efficient Algorithms, Security, Internet Architecture, Operating Systems, Data Structures, User Interfaces

#### **Columbia University**

(September 2016 – December 2017)

#### MS: Computer Science - Machine Learning

Coursework: Computer Vision, Advanced Machine Learning, Deep Learning and Neural Networks, Big Data

#### **Technical Skills**

Languages: Python, SQL, Java, C, C#, C++, HTML, CSS

Exposure: Android Development, Windows App Development, Bash, Hadoop, Numpy, Git, Theano

#### Work Experience

# Microsoft: Software Development Engineering Intern (C++, C#)

(May 2015 - August 2015)

- Created a brand new feature on Windows 10 that pins contacts to Start menu using C#, C++
- Implemented a new Live Tile Template for the Start Screen to create animations that include Facebook and Twitter Updates
- Optimized social integration by creating cache to lower number of cloud calls

#### **Juniper Networks: Software Engineering Intern (Python)**

(June 2014 – August 2014)

- Created a remotely executable package that tests the sanity of a loaded network stack module in JUNOS
- Wrote scripts in Python for the dTrace Tool that examined the state at which a given kernel was at

#### Salesforce.com: Extern

(January 2014)

Shadowed lead software engineer and exposed to the Force.com Platform team

#### **Equinix: Software Engineering Intern (Java)**

(June 2013 – August 2013)

 Worked with gamification 3<sup>rd</sup> party companies for customer facing and internal systems to design a webapp by working with different API's and implementing AJAX calls and jQuery

#### **Selected Projects**

#### Graduate Research under Vice Dean Shih Fu Chang

• Currently working on a project involving deep learning to optimize facial recognition

#### Research: Machine Learning, Big Data - OskiLab Powered by Berkeley Institute of Data Science (BIDS)

- Used machine learning and cloud computing to build and analyze new data sets on a variety of markets including bitcoin, wine, and real estate
- Worked with machine learning packages for text analysis of forums that were scraped to test several hypotheses

### San Francisco Police Dept. - Crime Data Analytics (Python)

- Used several machine learning and data science techniques to show common trends between crimes
- Created an application to provide users with the safest way to reach home, to avoid a possible crime

# Spam vs. Ham, Digit Classifier (Python)

• Created algorithms for differentiating ham vs. spam and properly identifying handwritten digits 0-9, by implementing decision trees, SVM, Gaussian Models, Linear Regression, and Neural Nets

#### Earthquake Alert (Android)

• Watch and phone app. that immediately alerts you when an earthquake strikes anywhere around the world and creatively displays photos taken by users in the area, using Instagram and Google Locations API

#### IoT Walking DJ [Presented at Microsoft "OneWeek" Hackathon 2015] (C#)

Created a wearable costume that plays music from SoundCloud accounts and adjusts lights

# **Cal Dining Application (Android)**

- · Created Android application that gives live updates on what food is being served at which dining hall
- Scraped all information to allow a user to keep track of calories, proteins, etc.

# Leadership & Awards

# **Teaching Experience**

- Teaching Assistant for Programming Languages (Python) at Columbia University (COMS W3101)
- Lab Assistant for Data Structure class at UC Berkeley (CS 61B)

#### **Leadership Award Scholar**

 Merit-based scholarship that recognizes undergraduate students at UC Berkeley who demonstrate innovative, initiative-driven leadership impacting their academic, work, or community environments