# **Harish Shanker**

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

#### Education

# University of California, Berkeley

(2012 - 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 (2016 - 2017)

## MS: Computer Science - Machine Learning

Coursework: Computer Vision, Advanced Machine Learning, Deep Learning and Neural Networks, Advanced Software Engineering, Natural Language Processing

# **Technical Skills**

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

Exposure: Android Development, Windows App Development, Numpy, Git, Theano, Keras

# **Work Experience**

# Google: Software Engineering Intern

(May 2017 - Present)

• Currently working on several new features for Google Keep

# 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 and optimize 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

#### **Selected Projects**

# Language Modeling for Large Vocabularies (Keras, Billion Word Benchmark Dataset)

 Proposed a new method for NLP tasks by modeling a RNN architecture that predicted both a mean and variance for a Gaussian distribution which predicted the next word vector instead of the word itself

# **Graduate Research Project: Attribute Sensitive Hashing**

• Designed a new way to map face attributes to the hash layer of a deep network, using Lasagne / Theano 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

# 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

## 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

# Leadership

# **Teaching Experience**

- Have been working with NGO Elite-Education to design a CS curriculum to be used in schools in Ghana –
  Will be traveling to Accra to implement this curriculum in August 2017
- Awarded CA Fellowship by Columbia CS Department for exceptional work as a TA (Full Tuition Paid)
- Teaching Assistant for Programming Languages (Python) and Computer Networks at Columbia University (COMS W3101, COMS 4119)
- Lab Assistant for Data Structure class at UC Berkeley (CS 61B)

## Director of Special Projects: Project RISHI National Team

- Key member of an American and Indian non-profit organization whose mission is to promote the sustainable development and growth of rural Indian communities
- Led efforts to improve school infrastructure and post-school career options for students in Bharog Baneri, Himachal Pradesh during the summer of 2015

## **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