# **Harish Shanker**

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#### **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 Track)

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

#### **Technical Skills**

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

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

### **Work Experience**

### **Google: Software Engineering Intern**

(May 2017 – July 2017)

• Developed several brand new features for Google Keep including image sync statuses, search text highlighting, and auto-bulleting on Android app

# 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
- 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 current state of the kernel

#### **Selected Projects**

#### Gig Digger (Won 1st Place at Start Up Competition in 2017 hosted by JP Morgan, NYC)

· Created a platform for upcoming musicians and comedians to connect with venues

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

- Extended RNN architectures to large vocabularies by predicting word vectors rather than one-hot vectors **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

• 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**

- Currently 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)

#### Director of Special Projects: Project RISHI National Team

- Key member of organization whose mission is to promote sustainable development in rural India
- 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: UC Berkeley

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