## SHARAN PRAKASH SUBRAMANYA

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Expected Graduation: May 2016

2010-2014

### **EDUCATION**

Viterbi School of Engineering, University of Southern California.

Master of Science in Computer Science with Data Science Specialization, GPA:3.73/4.0

RV College of Engineering, Bangalore, India

Bachelor of Engineering in Computer Science, CGPA: 4.0/4.0 or 9.62/10.0

Graduated with First Class Distinction and received Ranked Merit Honors.

#### TECHNICAL SKILLS AND CERTIFICATIONS

- Proficient in C, C++, C#, Java, SQL, HTML, AJAX, PHP, JavaScript, CSS, JQuery, XML, Android Programming, Python, Ruby, Git
- Machine Learning modeling applications using R, LIBSVM and SVMLIGHT. OS knowledge in Windows, UNIX and UBUNTU.
- Stanford University Online Courses in "Cryptography" and "Algorithms: Design and Analysis" through coursera.org.
- Honors: Received Accreditation from the Embassy of Sweden for efficient management of Sweden Nobel Memorial Quiz, 2011.

### **INTERNSHIPS**

# Yahoo, Sunnyvale, California, USA

May 2015 – Aug 2015

- Successfully productionized an APACHE STORM system to process live server data from Yahoo's worldwide Data centers.
- Developed a Ruby GEM to implement REST API services to Yahoo's internal Cloud system along with RSpec production tests.
- Worked on CHEF infrastructure management, implementing Synthetic Monitoring for all nodes on the CHEF cluster.

### Strand Life Sciences, Bangalore, India

Jan 2014 - May 2014

- Developed a Machine Learning model to predict the Effects of Mutations on Proteins and to detect patterns that can lead to cancer.
- The Support Vector Machine Learning model developed outperformed existing models with an accuracy of 90-95%.
- Won top place for best final semester Undergraduate project in Data Analysis at RV College of Engineering, 2014.

### Microsoft, India Development Center, Bangalore, India

Jun 2013 - Sep 2013

- Enhanced the performance of Image Classification for Bing Ads using Machine Learning and Cloud Computing.
- Developed an Online Crowd Sourcing data analysis tool for manual labeling of images into critical analysis categories.
- Optimized the existing Production system by developing Combined 2-Tier Classification Mechanisms using image and text features.

## Indian Institute of Science, Bangalore, India

Jun 2012 - Sep 2013

- Involved in Medical Intelligence and Language Engineering using Natural Language Processing.
- Developed and integrated an Android Application Wrapper for Text-to-Speech Synthesis in Kannada and Tamil languages.
- Project currently used at helping speech disabled and visually impaired people overcome their communication barrier.

### ACADEMIC PROJECTS

### **Natural Language Processing**

Spring 2015

- Developed a Relevant Tweet generator using Twitter live data, Hidden Markov Models, P-CFG's and Dependency Parsing.
- Developed NLP language models using Naive Bayes and Perceptron Machine Learning techniques for Email-SPAM classification, Sentiment Analysis, Parts-of-Speech tagging, Named Entity Recognition and Homophone correction in natural language using Python.

### **Information Retrieval and Web Search Engines**

Spring 2015

- Successfully implemented a web crawler to retrieve scientific data using NUTCH and TIKA with live de-duplication of web-pages.
- Indexed the data using SOLR implementing link based and content based ranking algorithms for search queries.
- Developed a UI for retrieval of search results using D3 to display the geographical and time based interpretation of scientific data.

## Web Technologies and Cloud Computing:

Fall 2014

- Developed a web domain to display real time "Real Estate listings" in the United States. The UI was built for enabling multi-device accessibility using Bootstrap, HTML, CSS and JavaScript framework. Information retrieval and processing was completed using PHP scripts running on Amazon Web Service cloud and Apache Server. Also included Social Media integration using Facebook API.

## **Artificial Intelligence**:

Fall 2014

- Developed AI for the "Reversi" Game implementing Minimax-algorithm and Alpha-Beta Pruning to predict the best move for a user.
- Implemented Backward-Chaining for knowledge base query inference, which mimics human-like Inference for decision making.
- Implemented Uniformed Search Algorithms with loop detection for BFS, DFS and Uniform-Cost Search techniques.

## **VOLUNTEERING AND EXTRA CURRICULAR**

- Currently appointed as the Yahoo USC student Ambassador, working as a liaison to the HR team during the year 2015-16.
- Successfully completed "Ethical Hacking" Workshop on Information Security and Cyber Forensics.
- Student Volunteer at "Nasscom Product Conclave", an Entrepreneur Convention held at Bangalore, 2013.
- Volunteer at "Samarthanam: Trust for the disabled", an NGO aimed at helping visually impaired students.