SHARAN PRAKASH SUBRAMANYA

spsubram@usc.edu www.linkedin.com/in/sharansubramanya
2620, Severance Street, Apt#14, Los Angeles, California-90007 +1-(213)-327-7425

EDUCATION

Viterbi School of Engineering, University of Southern California. Expected Graduation: May 2016
Master of Science in Computer Science with Data Science Specialization, GPA:3.73/4.0

RV College of Engineering, Bangalore, India 2010-2014
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++, Java, Python, Ruby, Git, SQL, HTML, AJAX, PHP, JavaScript, CSS, JQuery, XML, Android Programming.
- Machine Learning modeling using MATLAB, LIBSVM and SVMLIGHT. OS knowledge in Windows, UNIX and UBUNTU.
- **Stanford University Online Courses** in "Cryptography" and "Algorithms: Design and Analysis" through coursera.org.

PROFESSIONAL EXPERIENCE

Yahoo, Sunnyvale, California, USA May 2015 – Aug 2015
- Successfully productionized an APACHE STORM system to process live server data from worldwide data centers for analysis.
- Developed a Ruby GEM to implement REST API services to the internal Cloud storage 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 SVM model developed using LIBSVM and SVMLIGHT outperformed existing models producing accuracies 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
- Worked in Medical Intelligence and Language Engineering Lab harnessing Natural Language Processing for Speech synthesis.
- Developed and integrated an Android Application Wrapper for Text-to-Speech Synthesis in Kannada and Tamil languages.

ACADEMIC PROJECTS

Graduate Assistant, Computational Social Science Lab, USC Fall 2015
- Involved in computational text analysis for psychological research at the Department of Psychology, USC
- Working on Open-Source feature development for the Text Analysis, Crawling and Interpretation tool - TACIT. http://tacit.usc.edu

Machine Learning Fall 2015
- Developed KNN, Decision Tree, Naïve Bayes, Logistic Regression, SVM and K-Means algorithms in MATLAB for data analysis.
- Implemented optimization techniques like multidimensional Gradient descent, Sequential Feature selection and data preprocessing.

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 crawled data using SOLR implementing link based and content based Page 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.

Currently appointed as the Yahoo USC student Ambassador, working as a liaison to the HR team during the year 2015-16.