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KRISHNA SAI RUDRA DEV TALLAPRAGADA

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EDUCATION

Los Angeles, CA **University of Southern California** **August 2016 – May 2018**
- M.S. in Computer Science, **GPA: 3.82**
- *Coursework*: Algorithms; Artificial Intelligence; Web Technologies; Information Retrieval; Natural Language Processing

Hyderabad, India **Osmania University** **August 2012 – May 2016**
- B.E. in Computer Science, Dean's List, **GPA: 3.9**
- *Coursework*: Software Engineering; Databases; Operating Systems; Data Structures; OOPS Concepts; Data Mining

TECHNICAL SKILLS

- **Programming:** C, C++, Python, Java, C#, VB.Net
- **Web Technologies:** HTML, JavaScript, CSS, XML, PHP, Ajax, JQuery, BootStrap, JSON
- **Data/Databases:** SQL, PL/SQL, MongoDB, Hadoop
- **IDE's, Libraries and Tools:** Visual Studio, Eclipse, AWS, Google Cloud, Keras, TensorFlow, OpenCV, NLTK

WORK EXPERIENCE

Software Developer Intern **Dromebox Labs** **Summer 2017**
- Worked with the AR team to build a real-time data acquisition module and a data pipeline to synchronize the packets.
- Designed and developed a framework for transferring compressed data acquired from 5 sensors over TCP to a server which visualizes the data points in Unity.
- Reduced time by 40% to acquire data in parallel from different sensors in real-time using multi-threading.

Research Assistant **Integrated Media Systems Center, USC** **Spring 2017**
- Worked in a team of 3 to redesign the existing retrieval algorithm of the "MediaQ" web application framework.
- Improved accuracy of the Scene Location Determination module by developing a view triangulation algorithm.

Advisory Analyst Intern **Deloitte India, Offices of U.S** **Spring 2016**
- Worked in AERS division with the Risk Analytics team and performed data analytic operations on data belonging to clients of Life Sciences and Health Care industry.
- Performed data wrangling and checked for validity and completeness of Journal Entry Transactions using ACL Analytics.

PROJECTS

- **Feature Extraction for Author Attribution and Classification** (2017): Extracted features that improved the accuracy of the Naïve Bayes Classifier to perform author attribution, based on the works of Bronte and Shakespeare. ***Python, NLTK***
- **Constituency Parser** (2017): Trained the ATIS portion of Penn Treebank to build a probabilistic parser using Viterbi CKY algorithm. Improved F1-Score by making modifications like parent annotations, and order-2 markovization. ***Python, NLTK***
- **Inverted Index Using a Hadoop Cluster** (2017): Implemented Map-Reduce algorithm to construct an Inverted index for a corpus of 3000 English books using Hadoop cluster. ***Java, Hadoop, Google Cloud***
- **Convoluted Neural Network for Optical Character Recognition** (2017): Designing a CNN with a center loss function to improve the accuracy of OCR process. ***Python, Keras, TensorFlow***
- **Image Retrieval for Localization using Bag of Words model** (2016): Led a team of 3 to develop an application to determine longitude, latitude of the place where a given query image was captured. Reduced execution time by up to 80% by implementing BOW model instead of brute force comparison of dataset images. ***C++, OpenCV, Visual Studio 2010***
- **File Sharing Website with End-User Hash Verification** (2016): Developed a website that enables two end users to share pictures privately and access them as required using a hash value generated based on the pair's email ids with backend storage using MongoDB. ***HTML, JavaScript, PHP, MongoDB***
- **Intelligent Agent (A.I)** (2016): Developed a game playing agent using A*, DFS, mini-max algorithms with alpha-beta pruning. Also, developed an inference agent to verify the validity of rules using resolution. ***Python***
- **System Control using Speech** (2015): Led a team of three to develop a program to control various applications and system settings through different speech commands. ***C#, Visual Studio, Microsoft Speech***

AWARDS

- **Performance Award, Deloitte (2016):** Awarded for providing excellent client service excellence.
- **Third Prize, IIT-BHU (2016):** Awarded All India 3rd prize for Python Programming Contest out of over 300 teams.