VENKATA SIVA SAI DHEERAJ RAMISETTI

+1 (682) 230-4656 | 2700 Ellendale Pl, Apt 106, Los Angeles, CA 90007
ramisett@usc.edu | linkedin.com/in/rvssdheeraj | dheerucr9.github.io

EDUCATION

University of Southern California, Los Angeles, California **January 2018 - December 2019**
Master of Science, Computer Science GPA: *3.38/4.0*
Coursework: Analysis of Algorithms, Web Tech, AI, Information Retrieval, ML, NLP, DB Systems

Amrita Vishwa Vidyapeetham, Coimbatore, Tamil Nadu, India **July 2013 - May 2017**
Bachelor of Technology, Computer Science and Engineering GPA: *8.53/10*
Coursework: Data Structures, Databases, Software Engineering, Operating Systems, OOP

TECHNICAL SKILLS

- Languages: Python, Java, C++, C
- Web Technologies and Databases: React, Node.js, Flask, Django, HTML5, CSS3, JavaScript, PHP, XML, SQL, MYSQL
- Training: CCNA Routing and Switching: Networks and Essentials, Scaling Networks, Connecting Networks

WORK EXPERIENCE

Amazon, Amazon Web Services (AWS), Cupertino Languages/Tools: ReactJS, Flask, Python, JavaScript
Software Development Engineer Intern **May 2019 - August 2019**

- Developed an internal web application tool for network link monitoring and failure analysis of AWS network infrastructure devices in lab and production. Front-end: React.js, Backend: Flask
- Added a layer of abstraction by doing away with long repetitive commands while still maintaining same level of sophistication.
- Incorporated smart indicators to identify and highlight anomalies in data attributes for quick identification.
- Multifold increase in troubleshooting efficiency through data visualization and smart indicators.

Department of Psychology, USC Dornsife Languages/Tools: Javascript, Express.js, Python
Web Developer **January 2019 - May 2019**

1. Piano Game
   - Developed multiple versions of Piano Games for a study on human psychology about the impact of instructions during human's learning process. Study included 150 participants.
   - Frontend: HTML, CSS, JS. Backend: Express.js. Data processing: Python.
   - Data processing: Python script extracts data from database, processes it and writes into an excel sheet.
2. Sushi Game
   - Modified and improved existing code for Sushi game and performed analysis using python script. Played by 150 participants.

Polaris Consulting and Services Languages/Tools: Selenium WebDriver, Java, JXL
Software Engineer Intern **May 2015 - July 2015**

- Built a tool to automate user simulation on SpiceJet web application to test exhaustively.
- Worked extensively on Java using Selenium WebDriver for automation and JXL API for logging messages.
- Improved quality of web application by identifying error cases from analyzing results and presented a graphical report.

PROJECTS

Sequence-to-Sequence Recursive Neural Networks for POS Tagging – *Python, TensorFlow*

- Built a model for a part-of-speech tagger for multiple languages by implementing a bi-directional LSTM.
- Compared model with a version of Hidden Markov Model for potential improvements.
- Achieved accuracies of 95.4% and 94.5% on Italian and Japanese languages respectively.
- Optimized algorithm by stacking LSTM hidden layers to increase depth of model.

Applicant Allocation Algorithm for Homelessness App – *Python, Spyder*

- Devised an algorithm to assign applicants optimally to organizations that serve homeless community.
- Implemented several different AI techniques such as greedy-heuristic search, an optimized max-max algorithm, iterative deepening search to reduce search space.
- Used dynamic programming to reduce run time of algorithm from exponential to polynomial.
- Generated solution within 3 minutes up until an applicant pool of size 150 with at least 80% accommodation.

Travel and Entertainment Search Web Application – *Node.js, Java, JavaScript, AWS*

- Developed a Web application and an Android application that allows users to search for places with advanced filters
- Results include google map with directions, reviews, photos, information about the place.
- Hosted a backend server on AWS in Node.js which requests data from relevant Google and Yelp APIs.

GASÉ Search Engine – *Python, pickle module*

- Collaborated with team of 3 students to design and implement a search engine in Python, for retrieval of optimal search results from a restricted data set.
- Constructed a two-layer dictionary to preprocess database. Data is stored in binary trees, saved as pkl files.
- Results are provided by searching query terms on binary trees with term frequency as search criteria.