# JAYASREE ARE GUNASEKHARA RAO

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#### **EDUCATION**

MS Computer Science | University of Southern California

Aug. 2018 - May 2020

B.Tech. Computer Science & Engineering | Amrita Vishwa Vidyapeetham Aug. 2014 - May 2018

## **SKILLS**

Languages: Python, Java, PySpark, MySQL, C++, C

Web: PHP, JavaScript, HTML, CSS, Bootstrap, jQuery, XML, Angular7, NodeJS, AJAX, TypeScript

Others: Oracle, PostgreSQL, XAMPP, WAMP, Solr, Azure, Android Studio, MongoDB

## **PROJECTS**

## Responsive Weather Forecast Webapp

May 2020

V.1.0 (PHP, JavaScript, HTML, CSS) | V.2.0 (Angular 7, NodeJS, HTML, CSS, Bootstrap)

- Designed and deployed a dashboard on Azure to forecast weather using DarkSky API
- Results comprised of multiple weather parameters with graphs for the following week
- Routed Google and DarkSky API calls in v.2.0 through NodeJS server setup on Azure
- Improved v.2.0 with responsive design using Bootstrap and added favorites tab feature

## Solr Web Search Engine | Solr, Python, PHP, HTML, CSS

Apr. 2020

- Built a search engine to display results of NYTimes.com inclusive of autocomplete and spell check features
- Incorporated Lucene and PageRank algorithm using inverted index of downloaded HTML files of NYTimes, created by Solr and TIKA parser

#### Food Truck Android App | Android Studio, Java

Jan. 2020

- Crafted an application to find open street food trucks in San Francisco along with map
- Initiated a description box with address, operating hours and items available for particular food truck, on click of respective location marker in the map view

#### Yelp Recommendation System | PySpark, Python

Oct. 2019

- Weighted features of Yelp dataset against each other to maximize accuracy
- Selected user, average stars of business, review count, latitude and longitude attributes
- Achieved RMSE of 1.07 on predicted user ratings with a trained user-based model
- Enhanced the model with a hybrid combination of XGBoost and SVD algorithms
- Accomplished higher accuracy and lower time taken with a RMSE at 0.981

#### **EXPERIENCE**

## Machine Learning Intern | CarmaCam, USC

Aug. 2019 - Nov. 2019

- Drafted a model using OpenCV to detect over speeding vehicles in videos
- Identified vehicles labels using YOLO object detection algorithm
- Programmed speed calculator using detection box displacement and frame timing

## Data Analyst | LinkedIn Campus Editing Team

Feb. 2019 - May 2019

- Proposed ideas with team to finalize survey questions for LCET LinkedIn post
- Spearheaded team to gather responses to the online questionnaire from USC students
- Analyzed the response data to represent majorities and minorities for topic of the month

#### **PUBLICATION**

## A Study of Various Result Merging Strategies for a Meta Search (ISSN 2227-524X) July 2018

- Reviewed 10 algorithms in comparison of performance to rank results for a search engine
- Published in International Journal of Engineering & Technology (SCOPUS indexed, v. 7, n. 3.6, p. 255-258)