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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

PROJECTS

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

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

Others: git, Oracle, PostgreSQL, XAMPP, WAMP, Solr, Azure, Android Studio, pip

EXPERIENCE

R&D Intern | CCC Information Services Inc.

Nov. 2020 – Present

Vehicle Damage Cost Estimate

- Devising a ML approach to calculate overall cost estimate for repair of damage parts in vehicle

Overexposed Vehicle Photos Detection

- Constructed a ML model to detect overexposed vehicle images that are sent to insurance claims
- Trained the model using histograms converted from images to boost the accuracy to 87%
- Ported the model to webapp for browser platform using Python Flask server
- Implemented unit tests and increased code coverage by 40% for python CCC specific pip packages
- Enhanced user design by converting XML data to PDF documents for quick insights

Machine Learning Intern | CarmaCam, USC

Aug. 2019 – Nov. 2019

- Drafted a prototype with OpenCV using YOLO object detection to detect over speeding vehicles
- Contributed prototype to help insurance companies sanction claim for vehicles that violated traffic rules

Data Analyst (Volunteer) | LinkedIn Campus Editing Team

Feb. 2019 – May 2019

- Led the team to analyze survey data to represent student community on USC specific LinkedIn post

PROJECTS

Weather Forecast Webapp

Apr. 2020 - May 2020

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

- Deployed a dashboard on Azure to display detailed 24*7 graphs for weather parameters
- Routed Google and DarkSky API calls in v.2.0 through NodeJS server setup on Azure
- Improved user experience by reducing the response time using asynchronous NodeJS API calls

NY Times Search Engine

Feb. 2020 – Mar. 2020

- Built a NYTimes specific search engine using PHP, Solr with autocomplete and spell check features
- Incorporated Lucene and PageRank algorithm on inverted index of files, created by TIKa parser

Food Truck Android App

Jan. 2020 - Feb. 2020

- Crafted an application to find open food trucks in San Francisco along with map view and availability

User Rating Prediction

Nov. 2019 - Dec. 2019

- Devised a recommender system using PySpark to predict user's rating in Yelp dataset
- Performed feature selection to create weighted model by eliminating non-contributing attributes
- Developed the model with hybrid system of XGBoost and SVD algorithms to reduce RMSE by 10.7%

Artificial Intelligence & Machine Learning Projects

Sep. 2019 - Dec. 2019

- Designed decision making AI game agents using hidden markov & constraint satisfaction methods
- Used multiple approaches of KNN, K-Means, Decision Tree, Regression to build efficient ML models

PUBLICATION

International Journal of Engineering & Technology (SCOPUS, v. 7, n.3.6, p. 255-258)

July 2018