ASHWIN VENKATESHA

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EDUCATION

Master of Science in Data Informatics
University of Southern California, CA
May 2019
Bachelor of Engineering in Information Science
Visvesvaraya Technological University, India
June 2014

TECHNICAL SKILLS

• Programming: Python, Java

ML Tools: Tensorflow, Scikit learn, Apache Spark, Hadoop, Matplotlib, Keras

• Databases: Oracle SQL, MySQL, Firebase

• OS: Unix/Linux, Windows

WORK EXPERIENCE

Graduate Research Programmer Information Sciences Institute, USC

August 2017-Present

- Identified anomaly and gained insights from data collected from workflow executions environments.
- Aggregated workflow data comprised of read bytes, write bytes, system read calls, system write calls, system write calls and other system specific attributes, stored in nosql database called 'InfluxDB'.
- Developed modules to query database and extract data grouped on various input parameters.
- Identified anomalies by comparing patterns of data specific to each attribute.
- Analyzed accrued data and presented visualizations of system specific attributes with associated anomalies.
- Applied unsupervised machine learning technique, fuzzy c means clustering to look for clustered data.

Software Engineer Micro Focus, Bangalore, India

July 2015 - May 2017

- Automated web application of 'NetlQ Access Manager' using Selenium.
- Administered the synergy of Bangalore and Provo automation frameworks.
- Directed automation initiative by charting out plans and milestones.
- Responsible for overall 25% growth in automated testcases.
- Ideated the inclusion of accumulating data from customers and analyzing it for risk detection as an update to existing feature called risk based authentication.
- Orchestrated training sessions on Java to internal teams.

Associate Software Engineer Novell, Bangalore, India

Sept 2014-June 2015

- Coordinated the automation initiative for the desktop client which resulted in automation of almost 8000 testcases.
- Used Java and IBM STAF to automate desktop client of 'Novell Filr' on Windows and Mac systems.
- Developed automation framework from scratch to automate 'Novell Filr' for Windows and Mac system.

PROJECTS

Music Recommendation system using scikit learn

- Analyzed 1.8 GB dataset comprised of song metadata and implemented popularity-based-recommendation system, and item-based-recommender system.
- Employed precision recall curve to compare model performances and identified that item based recommender system performs better than popularity based recommender system.

Exploratory and Sentimental analysis of IGN Game reviews using TFlearn

- Analyzed datasets for insights related to game genre, popularity and platforms with pie charts.
- Performed sentiment analysis using TFlearn to predict a sentiment from a set of 11 classes.
- Accuracy observed is 40% after using three layers of LSTM with 0.9 dropout.

Classification of pokemons using Tensorfow

- Analyzed pokemon dataset and designed an artificial neural network in tensorflow to classify pokemons based on various attribute types.
- Achieved a prediction accuracy of 76%.

Application of Kmeans Model and Gaussian Mixture Model

- Applied KMeans unsupervised learning algorithm to cluster 150 2D points in space.
- Analysed hard clustering versus soft clustering by applying expectation maximization algorithm on Gaussian mixture model on same dataset.

ACHIEVEMENTS

- The Security Council in our company identified our hackfest project, Integrating Zed Attack Proxy with Continous Integration Systems ' and generated a training module for other teams based on that.
- Awarded "Top Performer" in our company owing to my contribution during product release.
- Awarded 'Innovator award' during hackfest.