Sai MarapaReddy

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Technical Skills

Languages Java, Python (*Numpy, Pandas, Scikit-Learn, MatPlotLib*), Yang, SQL
Technologies Kafka, Splunk, Mininet, Hadoop, Spark, OSS/NMS, JUnit, Selenium IDE
Techniques Statistical Modeling, Exploratory Data analysis, Classification and Regression techniques, Bayesian Methods, Random Forests, Decision Trees, SVM, Neural nets, cross validation, encoding, Clustering, Feature Engineering, Dimensionality reduction
Protocols Open Flow v1.3, TCP/IP

Education

- **M.S.** in Computer Software Engineering, *San Jose State University***,** San Jose, CA (Jan'13 - Dec'14)
  B.Tech in Information and Communication Technology, *DAIICT*, India (Aug'06 - May'10)

Experience

Brocade Communications Systems *Software Engineer (Machine Learning)* (Jan'15 - Present)

Network Analytics with SDN
- Predict the traffic patterns using TSDR (Time Series Data Repository) project from ODL
- Built application that re-routes traffic based on the predicted congested routes
- Display SNMP / Open flow metrics fetched from south bound devices on UI using REST API
- Created a data pipeline among south bound SNMP Plugin - SNMP Collector - HBase – Kafka message broker – Splunk, along with end-end working setup in real time environment
- Application adds the SNMP devices and configures the polling interval at run time

Open Daylight Open Source Platform - SDN
- Committer and PTL for l2switch project in OpenDaylight SDN controller
- Monitor and pull TSDR project downstream and build application based on open source artefacts
- Implemented Ipv4 / Ipv6 Arbitrary bit mask feature in OpenDaylight controller
- Built Security Scanner Application using MD-SAL of OpenDaylight Controller
- Developed MD-SAL & REST API application using OpenDaylight Lithium release
- Designed & built SDN application which creates paths between two hosts using open flow protocol
- Designed and developed robot ride framework test suites which improves speed of automation
- Automated manual test cases which gives more confidence in releasing the product

Ericsson Inc. *Software Engineer Intern* (Jan '14 - Oct '14)
- Developed and integrated OpenDaylight applications through northbound interface using REST API

Ericsson India Global Services *Network Engineer* (May '10 - Jan '13)
- Launched new 5C carrier network rollout in dense urban areas
- Raised CR requests (Physical changes, parameters, timers, counters) to customers

Machine Learning Projects

Udacity Machine Learning Engineer Nanodegree
- Deployed Supervised learning techniques to predict if a person fits under potential donor base category
- Implemented Unsupervised learning techniques to segment customers into distinct categories
- Predicted real estate prices based on the house features with regression analysis

Hand written digit recognizer
- Built a neural network to predict hand written digits in images with convolutional neural networks

Kaggle Competition: Titanic dataset
- Exploratory analysis on the data to understand the correlation between features
- Built tree ensemble (random forest) to predict the passenger's survival

Achievements & Positions

- Secured twice Excellence Award for US Hackathon winner in 2015 & 2016
- Brocade Button Award for exceptional performance in Q4 2016
- BUGS certified SE Experienced Network Engineer at Ericsson
- Power award in Q2 2012, generated two Idea Saving forms (approx savings $0.01million/Annum) at Ericsson