Teja Madiraju

teja.madiraju12@gmail.com | +15189150038 | www.linkedin.com/in/tejamadiraju

EDUCATION

Stony Brook University, USA

(expected) December 2017

Master of Science - Computer Science

Osmania University, India

June 2014

Bachelor of Engineering in Information Technology

WORK EXPERIENCE

Software Engineer

Microsoft Corporation

June 2014 – May 2016

As a developer for Microsoft Azure's Site Reliability Engineering, my primary responsibility was to identify software gaps in operations management and design and build relevant version 1.0 applications. As part of this role, I

- Designed and developed a mobile app (Windows and Android) to remotely track service outage investigations.
- Designed and developed a .NET application to automate RMA workflows for Microsoft's Edge network servers.
- Designed and developed a chatbot on Lync UCMA platform that assists in Azure's outage investigations.
- Worked as a Crisis Manager to redesign operational workflows for Azure's Cloud Reliability Operations.

SUMMARY OF SKILLS

Proficiency: Python, MS SQL, Machine Learning with SKLearn, MS .NET 4.5

Experience: Java, C#, JavaScript, Apache Spark, TensorFlow, MS Azure, Numpy, SciPy, NLTK, D3.js

PROJECTS

Semantic Relation Extraction in Biomedical Natural Language Data

February 2017 – present

- Building a Deep Learning model for cross-document relation extraction in medical research papers.
- Performed a comparative study of existing Biomedical NERs on Longest Entity Mention tasks.
- Constructing a database of Named Entities from more than 10 million biomedical research papers.

Assessing Climate Vulnerability through Interactive Visual Analytics

March 2017 - May 2017

- Developed interactive visual interfaces using D3.js and Web GL to educate beginners about climate risk.
- Built predictive models with SKLearn to forecast climate vulnerability indices across countries and causal factors.
- Applied concepts like K-Means Clustering, Time Series Plots, Parallel Coordinates, Dimensionality Reduction.

Predicting the Star Cast of Hollywood Movie Remakes

October 2016 – December 2016

- Developed a novel scoring function that establishes probabilistic similarities between Hollywood actors.
- Performed K-Nearest Neighbors analysis to predict best replacements for original cast in Hollywood remakes.
- Performed data extraction, cleaning and analysis on an exhaustive data set of more than 1 million actors profiles.

Analysis of Artificial Neural Networks for Supervised Learning

October 2016 – December 2016

- Performed mathematical analysis of various artificial neural networks employed to solve classification problems.
- Tested their performance to identify potential credit card defaulters with an achieved accuracy of 83%.

Spatio-Temporal Analysis of New York City TLC Data

October 2016 – December 2016

- Analyzed 91 GB of data obtained from cab rides across New York City using Spark and AWS Elastic Map Reduce.
- Implemented Large Scale Machine Learning techniques to extract insights on commuting in urban communities.

A Map Reduce Back-end in Python

September 2016- October 2016

• Built a map reduce backend in Python that performs simple operations like matrix multiplication, relational operations in set theory and basic document analysis.