Lakshmimanaswitha Chimakurthi

Available for Full-time positions starting May 2019

EDUCATION

Northeastern University, Boston, MA

College of Computer and Information Science Candidate for a Master of Science in **Data Science** Jan 2017- Present

Expected Graduation - May 2019

Relevant Courses: Supervised Machine Learning, Unsupervised Machine Learning, Data Management & Processing

Algorithms, Natural Language Processing, Information Retrieval

VR Siddhartha Engineering College, Vijayawada, India

Apr - 2016

Bachelor of Technology in Information Technology

Relevant Courses: Database Management Systems, Data Warehousing, Data Mining, Business Intelligence

TECHNICAL SKILLS

Programming Languages: Python, R, Scala, SQL, C++, Java, MATLAB, Awk

Databases: Oracle, MySQL, MongoDB, Neo4J

Machine Learning: Linear/Logistic Regression, SVM, Tree Based, Neural Networks, Clustering, PCA
ML Tools: Scikit Learn, Pandas, Numpy, PySpark, Tensorflow, Keras, ARIMA, dplyr, BeautifulSoup

Data Visualization: Tableau, Excel, ggplot, R Shiny, Plotly, Matplotlib

Big data Technologies: Hadoop, Spark
Cloud Technologies: AWS, Elasticsearch

Containers: Docker

PROFESSIONAL EXPERIENCE

Channing Division of Network Medicine, Brigham and Women's Hospital, Boston, MA Data Science Co-op

May 2018 - Present

- Performed an entropy based clustering on various Lung-Tissue expression and methylation datasets and identified the cases/controls of COPD and clinical associations for each cluster and visualized the results with ggplot in R.
- Developed a docker image for cheweb (A tool for visualizing Channing's GWAS results)
- Developed a neural network on dosage values with stacked autoencoders to classify the case/control COPD status with an accuracy of 72%.

INDEPENDENT PROJECTS

• Price Prediction Of Used Cars (Python)

Developed a model using Gradient Boosting which predicts the price of the used cars using the features and achieved an RMSE of .76 and deployed a working app in Heroku using Flask API.

Predicting Hospital Readmissions (Python)

Developed a classifier which classifies diabetic patients readmissions using Random Forest Classifier and achieved an AUC of 0.66 on test data.

• Sentiment Analysis on Customer Tweets (Python)

Developed a sentiment analyzer using neural network which predicts the sentiment of the customer's tweets posted on Twitter.

ACADEMIC PROJECTS - Northeastern University, Boston, MA

Movie Recommender System (Python)

Developed a movie recommender system using collaborative filtering approach that suggests movies based on users past ratings for other movies using several ml algorithms and compared the results.

Understand Local Business Dynamics and Neighborhood characteristics with Yelp Data (Python)

Clustered the Yelp businesses data and Census data to identify how the local business dynamic patterns associate with population characteristics of the neighborhood and visualized the results using matplotlib.

• Prospect of Data Related Jobs in US (R, MongoDB, Plotly)

Scraped the Glassdoor salaries for data related jobs across US states and stored the data in MongoDb. Queried the database and Identified the top paying states, top hiring states and visualized the results using Plotly.

• Search Engine (Python)

Developed an Inverted Index and Search Engine over 80k document collection and provided a ranked list of documents using Okapi, BM25 retrieval models for a given set of user queries.

ACTIVITIES

Winning team member for INFORMS Data Visualization Hackathon - Presented a poster on Boston Crime Data Analysis.