VARSHINI REDDY

Current Location Dallas, TX | **Relocation** Yes | **Ph** (469) 610 – 1610 | **E** varshini.thatiparthi@gmail.com |
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OBJECTIVE

Machine Learning Engineer is actively looking for an intern/fulltime role, where I can apply two plus years of Machine Learning experience, six months of experience as a student Instructor and mentor.

EXPERIENCE

MIND CURRENT – Machine Learning Intern, Portland, OR (Virtually remote) May 2020 – Aug 2020

- Worked on stress prediction model using NLP, deep learning and machine learning models.
- Used tableau for creating dashboards, data visualization.
- Used MySQL, NoSQL modeling for fetching the information from database.

TRIO UPWARD BOUND – Instructor, Arlington, TX Oct 2019 – Present

- Taught Mathematics subjects (includes linear algebra, calculus, statistics, probability, geometry, trigonometry) to high school students and also helped them for SAT exam preparation

ACCENTURE - Machine Learning Engineer, Hyderabad, TG, India Oct 2017 – Aug 2019

- Worked for food service, and healthcare clients.
- Implemented the pre-train word embedding models to extract features from text responses.
- Using spacy and nltk, performed text analytic tasks like pos tagging, named entity recognition and tagging, finding the structure of the text sentence.
- Designed, trained, evaluated advanced neural network architectures like Recurrent Neural Networks (LSTM) using TensorFlow and keras.
- Applied state of the art machine learning techniques like SVM, Logistic regression, Random Forest regression etc., in scikit-learn for classifying the responses into business categories.
- Evaluated the machine learning models using standard metrics like Precision, Recall, F1-score, Log loss, Mean Square Error, and Root Mean Square Error.
- Performed exploratory data analysis using interactive Jupyter notebooks/pandas/numpy and presented proof of concepts.
- Used NVIDIA GPU for high performance computing on neural networks.

EDUCATION

University of Texas at Arlington	Master's in Computer Science	2019 - May 2021
G Narayanamma Institute of Technology	Bachelor's in computer science	2014 – 2018

KAGGLE PROJECTS

Twitter Analysis for US Airways – ULMFiT

- Goal of the project is to implement transfer learning in NLP
- Implemented Universal Language Model fine tuning (transfer learning) using fast ai.
- Performing feature engineering and text cleaning using pandas, nltk, and keras
- Also implemented the deep learning models like LSTM, GRU

Toxic Comment Classification Challenge

- Conducted data cleaning, text mining, vectorization to improve model performance.
- Tested multiple classification models such as Random Forest, Logistic and Extra trees classifier, and performed hyperparameter tuning to optimize the model prediction.
- Achieved 99% of accuracy with ROC AUC

Link https://www.kaggle.com/varshinithatiparthi/kernel64eed79506

Stack overflow Tag Prediction

- Suggested the tags based on the content that was there on the question posted on the stack overflow.
- Calculated the accuracy using Precision and recall
- Performed exploratory data analysis, data cleaning, text processing tasks with the help of nltk, pandas, numpy and scikit-learn.

PROJECTS

Movie Recommendation

- Implemented collaborative filtering techniques to predict movie ratings Probabilistic Matrix Factorization and nearest neighbor-based approaches using scikit-learn.
- Conducted experiments to suggest the best model parameters by testing algorithms on the Netflix dataset.

Emotion Detection

- Built a model to detect the happy or sad face from Image data, classified the emotions from the face images
- Performed the model on convolution neural network using tensor flow

Facial Recognition

- Built a facial recognition model using convolution neural network with the tensor flow framework.
- Performed image preprocessing, image augmentation

Amazon Review

- Performed sentiment analysis on the amazon review. Classified whether a review is positive or negative.
- Tested on multiple classification models such as Random Forest, Logistic and Extra trees classifier, and performed hyperparameter tuning to optimize the model prediction.

Link https://github.com/varshinireddyt/Sentiment-Analysis

Machine Fault Tolerance Prediction, Anomaly Detection

- Predicted fault tolerance of real time anomalies on univariate and multivariate time series data (sensor data) using machine learning algorithms like LSTM Auto encoder, K Means clustering, SVM.
- Performed data preprocessing and feature engineering to filter out the noise.
- Pinpointed the times of fault and failure in the machine with the help of data visualization.

Face Emotion Detection

- Built a model to detect the emotions of the human based on the image data set using convolution neural network (CNN) with the help of TensorFlow also achieved 99% accuracy.

Graph Processing

- Developed a map reduce program that calculates the shortest distance in a graph.
- Build the same program in different Big Data technologies like Hadoop, Scala, PIG, HIVE.

Link https://github.com/varshinireddyt/Big-Data-Cloud-computing

Website Portfolio

- Created a portfolio website using HTML, CSS based on the wireframes provided, wrote validations in Java script and PHP. Using PHP, stored and fetched the latest data from the MySQL database. Used JDBC for establishing the database connection
- Deployed the project in the UTA Cloud.

Link https://github.com/varshinireddyt/laravel_project

Website for Maverick Booking Facility

- Created a backend service using Java/Java EE language using Eclipse IDE

Link https://github.com/varshinireddyt/mac_facility

SKILLS

Programming Languages	Java, Python, Java Script
Web Technologies and Database	HTML, CSS, PHP, JSP, MySQL, No SQL
Frameworks and Tools	Numpy, Scikit-learn, TensorFlow, Keras, Nltk, Pytorch, Scikit-learn, TensorFlow, Keras, Nltk, Pytorch, Eclipse, Google Cloud Platform (GCP), Google Collab, AWS Sagemaker.

CERTIFICATIONS

Coursera: Machine Learning by Stanford University, Deep Learning Specialization (includes 5 courses) by deeplearning.ai, TensorFlow In Practice specialization by deeplearning.ai (includes 4 courses), Git by Atlassian, Natural Language Processing by Udacity