NEERESH KUMAR PERLA

+1 (774) 518-9337 • nperla@umassd.edu • LinkedIn • Neeresh's Portfolio • Neeresh's Github

Experience

Cognizant Hyderabad, India
Programmer Analyst Mar 2021 – Dec 2022

- Completed coding challenges and project deliverables: mini-project, main project, and hackathon.
- Developed automation scripts using Selenium in Java based on requirements.

Java and Digital Data Engineering Intern Feb 2020 – Sep 2020

- Developed an end-to-end java web application that stores user-entered data in the database.
- Developed an ALS model with over 100k rows of data for recommending movies to the user.

Wingfotech Pvt. Ltd. Hyderabad, India
Quality Certified Company deals in Technical Training, Manufacturing of DIY Robotics Kit and Robotics Lab
Artificial Intelligence Intern May 2019 – Jul 2019

- Responsible for learning, building, and researching different kinds of machine learning algorithms and applying them to real-world datasets.

Education

University of Massachusetts Dartmouth North Dartmouth, United States
Masters; Dec 2022 – present
Majors: Data Science

Mahatma Gandhi Institute of Technology (**MGIT**) Telangana, India
Bachelor of Technology; July 2016 – September 2020
Majors: Electrical and Electronics Engineering

Research Experience

An Experiment on Covid-19 Face Mask Identification Using Various Machine Learning Classification Algorithms:

- Developed a classification model which classifies whether the person is wearing a face mask or not. I have worked under Dr. Achuta Rao (Professor and Head of the Department - IT) who supported our ideas and provided guidance on creating such a model. I presented the paper at an online International Conference on "Recent Trends in Computer Science and Information Technology" (ICRCSIT-20).
- **Status:** In proceedings, **Paper ID:** ICRSCIT-0209 and **ISBN No:** 978-93-80831-66-4

Projects

Survey-Based Project (personal-projects/Survey Project)

- Performed a survey on 16 questions from the students (graduates and below) to answer the question: **Does teaching in the regional language affect their knowledge of the topic**?
- I found out that most of the students wanted to be teaching in regional language but not writing the exams. And students are preferring hybrid language from the lecturer but the notes and the question paper in English.
- Built a classification algorithm and achieved 71.9% train accuracy and 67.7% test accuracy. (There is a scope for improvement).

Data Science Salary Prediction (personal-projects/Data Science Salary Prediction)

- Performed web scraping to collect the data from glass door website.
- Performed data analysis, feature engineering, feature selection and built a regression model to predict salary.

Automated water plant system (neeresh/IoT (github.com))

- Measures the moisture content of the soil and discharges precise amounts of water, promoting water conservation and reducing the cost of wired irrigation systems.

Disorders (kaggle/Disorders at main · neeresh/kaggle (github.com))

- Performed Artificial Neural Networks (ANN) to classify 3 diseases and achieved 91.5% accuracy on the test data and developed a pipeline to automate classifying the unseen dataset.

House Price Advanced Regression Techniques (kaggle/House Prices - Advanced Regression Techniques at main · neeresh/kaggle (github.com))

- Developed a linear regression model to predict house prices. Dataset consists of 81 features.
- Predicted house prices using a linear regression model. The dataset contains 81 features. Data analysis, feature engineering, and feature selection were performed and r2 scores were 0.87 on train data and 0.84 on test data.

Space Ship Titanic (kaggle/Space ship Titanic at main · neeresh/kaggle (github.com))

- Performed Feature Selection techniques such as Exhaustive Feature Selection, Step-backward feature selection and Lasso to compare the model's output across all feature combinations.
- Performed Hyperparameter Optimization such as Grid Search and Bayesian Optimization to improve the model accuracy. And finally built a Pipeline to score new data.

Skills

- Languages – Python, Java, SQL, C, JavaScript, HTML, CSS, Basics of R, Basics of Scala, MATLAB.
- Frameworks – NumPy, Pandas, Selenium, Scikit-learn, Tensorflow, feature-engine, yellow bricks, Mlxtend, Skopt, Matplotlib, Seaborn, OpenCV, SQLAlchemy, Hadoop.

Certifications

- Microsoft Certified: Azure Fundamentals (AZ-900), Azure AI Fundamentals (AI-900), Azure Data Fundamentals (DP-900) & Azure Data Scientist Associate (DP-100).
- Stanford Online: Machine Learning by Andrew Ng.
- Udemy: Complete Tensorflow 2 and Keras Deep Learning Bootcamp.