KEERTHI GOPIREDDY

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PROFESSIONAL SUMMARY

Experienced Data Scientist with 6 years of professional experience, including 4 years in the AI/ML field and 2 years as a student assistant. Pursued Master of Science in **Artificial Intelligence** at the University of North Texas, with a focus on Machine Learning. Actively seeking opportunities to implement my learnings in real-world business problems while continuously learning and evolving in the field.

EDUCATION

University of North Texas | Denton, Texas | Jan 2023 - Dec 2024
*Master of Science, **Artificial Intelligence** | **CGPA: 4.0***

Jawaharlal Nehru Technological University | Hyderabad, India | Jul 2014 - May 2018
Bachelor of Technology, Electronics and Telematics

SKILLSET SPOTLIGHT

- Python Programming
- MATLAB
- Machine Learning Algorithms (Supervised and Unsupervised)
- Neural Networks
- Natural Language Processing
- Computer Vision

- Scikit-Learn
- NumPy, Pandas, OpenCV, NTLK
- Matplotlib, Seaborn
- TensorFlow, Keras and PyTorch
- Descriptive Statistics
- Inferential Statistics
- Data Analytics

- SQL, HiveQL
- Tableau
- Power BI
- Dataiku
- RapidMiner
- MLOps
- Microsoft Excel

WORK EXPERIENCE

Wipro Technologies: ***Data Scientist***   ***Aug 2021 to Dec 2022***

- Client - *Huawei Ads Platform:* Analysed and prioritized 150+ features post exploratory data analysis along with ensemble-based feature selection methods
- Implemented *early stop* and performed effective *hyper-parameter tuning* for an advertisement type and observed significant improvement on real-time data
- Fine-tuned predictive models, including Deep and Cross Network and FiBiNET, achieving an AUC score of 0.863 for predicting ad click-through probabilities
- Extracted data using HiveQL on regular basis from large datasets in HDFS to identifying patterns and insights to support data-driven decisions
- Played a major role in identifying *automation scope* and automation of capturing KPI from logs using Python scripts
- *Client - Citi Bank:* Automation and streamlining data cleaning and pre-processing using customer and beneficiary databases using Dataiku Platform

Amazon: ***Data Quality Specialist***   ***Aug 2018 to May 2021***

- Worked under Amazon Robotics in Amazon Vision Operating Centre (AVOC) currently known as Go-Artificial Intelligence (Go-AI) handling 5+ AI/ML based projects
- Responsible for synchronizing the needs of machine learning models with the standard operating procedure used in the project to identify the ground truth
- Streamlined trouble ticket process to eradicate low confidence ML outputs which increased the probability of identifying the root cause by 30% and decreased manual effort by ~20%
- Solely worked for *Canvas*, a robot used to transport items in Fulfilment centres, focusing on visual inspection, image segmentation and feature extraction to build a novel model using neural networks
- Worked on pre-processing and interpretation of data for 5 visual inspection ML models which include damage detection, human detection, failure mode detection, compliance and safety detection.
- Automated mail triggers using SharePoint and weekly reports sent to fulfilment centers decreasing manual effort by ~70%

ACHIEVEMENTS AND ACCREDITATIONS

- Merit Certificate with Excellent Grade in **'Advanced Certification Program in Artificial Intelligence and Machine Learning'** organized by IIIT Hyderabad and Talent Sprint
- Completed **'Lean Six Sigma Yellow Belt Certification'** by ACES Academy at Amazon
- Awarded with '**Champion IDS Research Analyst**' in Q2 2020 at Amazon
- Awarded with **'Champion Auditor - Silver'** in Q3 2020 at Amazon
- Accredited as **the 'Most Valuable Player'** in the audit team for the year 2020 at Amazon
- Awarded with **'Champion Auditor - Gold'** in Q1 2021 at Amazon
- Recognized as **'Outstanding Contributor'** in February 2022 by the client (Huawei)

KEY MACHINE LEARNING PROJECTS

Participated and completed 8 hackathons as a part of '**Advanced Certification Program in Artificial Intelligence and Machine Learning'** organized by IIIT Hyderabad and Talent Sprint. Main Hackathons include:

- **Literacy rate prediction | Colab using Python | Jan 2020**
  The goal of this Mini-Hackathon was to predict whether the literacy rate was high/ medium/ low in the different districts of India using multiple datasets and comparing the performance of multiple machine learning algorithms.
- **Speech classification | Colab using Python | Mar 2020**
  The objective of this Mini-Hackathon was to identify and classify simple vocal utterances such as 'yes' or 'no' using audio samples and tree-based machine learning algorithms

Developed multiple machine learning and deep learning models as a part of my Master's program on **Artificial Intelligence** at the **University of North Texas**. Key projects include:

- **Leveraging Deep Learning Models for Bird Species Classification | Deep Learning | Fall 2023**
  Focusing on Convolutional Neural Network (CNN), ResNet, DenseNet, and Vision Transformer (ViT) models involving training on feature-augmented image data to capture complex visual characteristics. This was implemented using Python programming language on the Google Colab
- **Generating Synthetic Faces using Generative Adversarial Networks | Machine Learning | Spring 2023**
  Developed a generative model using pre-trained models capable of producing realistic, high-quality synthetic faces indistinguishable from real faces. This was implemented using Python programming language on the Google Colab.
- **Pneumonia Detection using Neural Network | Software Development for AI | Spring 2023**
  Trained and improved the ability of a Convolutional Neural Network to identify if a patient has pneumonia using X-ray images. Created a local website to display the prediction when a new X-ray image is uploaded. Training of the model was done using Python programming language and deployment of the model to a local webpage was done using Streamlit.

CO-CURRICULAR ACTIVITIES

- Worked as a **Digital Imaging Student Assistant** (Feb 2023 - Dec 2024) at the University of North Texas:
  - ➢ Captured metadata for 100+ historical letters
  - ➢ Digitized 20+ archival books and ledgers with perfection.
- Participated in **MATLAB Arduino** course and completed a mini project on CNC controller
- Completed **Rapid Miner Machine Learning** Professional and Master Certification
- Participated in '**Ethical Hacking**' workshop conducted in Technocruise Hyderabad by Techkriti, IIT Kanpur