Keerthi Gopireddy

Data Scientist | Machine Learning Engineer

keerthi16101996@gmail.com 5126984660 Texas

http://www.linkedin.com/in/lakshmi-keerthi https://lakshmi-keerthi.github.io/my_portfolio https://github.com/lakshmi-keerthi

PROFESSIONAL SUMMARY

Result-oriented ***AI enthusiast*** with 6 years of professional experience, including 4 years in the AI/ML field focused on solving data-driven, real-world business challenges having a Master's in ***Artificial Intelligence*** with a 4.0 GPA.

Expertise in predictive modeling, data analytics, feature engineering, deep learning, machine learning algorithms, model evaluation, and model deployment, with a proven ability to enhance model accuracy and optimize processes. Strong domain knowledge in logistics, inventory management, and digital advertising with a focus on easily understanding end-user needs. Actively seeking cutting-edge opportunities in the field of *Artificial Intelligence / Machine Learning* to apply my knowledge to real-world problems while continuously learning 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

Programming	Machine Learning & AI	ML Libraries	Data Analysis	Visualization Tools	Foundations
Python	Machine Learning Algorithms	TensorFlow	NumPy	Tableau Desktop	Statistics & Probability
MATLAB	Neural Networks	Keras	Pandas	Power BI	Pattern Detection
SQL	Natural Language Processing	PyTorch	Matplotlib	Dataiku	Data Wrangling
HiveQL	Computer Vision	Scikit-Learn	Seaborn	RapidMiner	ML Ops

WORK EXPERIENCE

Wipro Technologies ***Hyderabad India*** ***Data Scientist*** ***Aug 2021 to Dec 2022***

- Performed exploratory data analysis followed by feature selection on 150+ features using XGBoost - increased the true positives by ~4% in the Huawei Ads Platform
- Automated capturing KPIs from the Huawei ML Ops platform using Python and reduced manual effort by 10%
- Implemented early stop on a Deep Learning model and increased the KPI (AUC) by ~4% for predicting ad click-through probabilities
- Automated data preprocessing using Dataiku for Citibank and reduced the load by ~45%

Amazon Robotics ***Hyderabad India*** ***Data Quality Specialist*** ***Aug 2018 to May 2021***

- 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%
- Worked on aligning standard operating procedures for feature identification of 4 machine learning models to business needs
- Automated mail triggers and weekly reports sent to fulfillment centers using Microsoft SharePoint decreasing the manual effort by ~70%
- Performed quality analysis on low-confidence machine learning predictions to identify the root causes leading to implementing corrective measures at fulfillment centers
- Solely worked for Canvas, a robot used to transport items in fulfillment centers, focusing on visual inspection, image segmentation, and feature extraction to build a novel model using neural networks

ACHIEVEMENTS AND ACCREDITATIONS

- Merit Certificate with Excellent Grade in '***Advanced Artificial Intelligence and Machine Learning Program***' from IIIT Hyderabad (Dec 2018 to March 2019)
- '*Lean Six Sigma Yellow Belt Certification*' by ACES Academy at Amazon for performing quality analysis on trouble ticket process
- Awarded with '*Champion IDS Research Analyst*' in Q2 2020, Q3 2020, and Q1 2021 at Amazon for expertise in root cause analysis and feature identification
- Accredited as the '*Most Valuable Player*' in the audit team for the year 2020 at Amazon for streamlining the trouble ticket process
- Recognized as '*Outstanding Contributor*' in February 2022 by the client (Huawei) at Wipro Technologies for performing effective hyper-parameter tuning eventually increasing the ad click-through rate
- Certified as an ML Practitioner and Advanced Designer by *Dataiku*

KEY MACHINE LEARNING PROJECTS

Participated and completed 8 hackathons as a part of the '**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**

  Trained a multi-class classifier to predict the literacy rate as high/ medium/ low in different districts of India using multiple datasets. Compared the performance of multiple machine learning algorithms both parametric and non-parametric.
- **Facial Recognition using Siamese Network | Colab using Python | Mar 2020**

  Trained a neural network model (Siamese Network) using celebrity faces dataset to identify the similarities and differences between faces. The model was able to identify the actor in the image with more than 85% accuracy.

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**

  Trained a multiclass classification model using Convolutional Neural Network (CNN), ResNet, DenseNet, and Vision Transformer (ViT) models involving training on feature-augmented image data to capture complex visual characteristics. Used ensemble methods to stack all the models and achieved a testing accuracy of 93% on unseen data.
- **Generating Synthetic Faces using Generative Adversarial Networks | Machine Learning | Spring 2023**

  Developed a generative AI model using GAN model architecture capable of producing realistic, high-quality synthetic faces indistinguishable from real faces. GAN uses a generator and discriminator to produce fake faces. The model was able to produce fake faces which do not exist in the dataset. This was implemented using Python programming language on the Google Colab using TPU.
- **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. The model was able to classify with more than 90% confidence level. 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 3000+ letters to preserve historical records
  - Digitized 20+ archival books and ledgers with perfection for preservation
- Participated in **MATLAB Arduino** course and completed a mini project on CNC controller
- Completed **Rapid Miner Machine Learning** Professional and Master Certification
- Participated in the '**Ethical Hacking**' workshop conducted in Technocruise Hyderabad by Techkriti, IIT Kanpur