# CHARAN R K

Bengaluru, KA

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## PROFILE OBJECTIVE

I'm Charan, an aspiring AI Engineer and Data Scientist skilled in Machine Learning, Deep Learning, and Data Analytics. Proficient in predictive modeling, AI-driven solutions, and optimization techniques. Seeking an opportunity to apply expertise in AI Engineering, Data Analysis, and Prompt Engineering.

## EDUCATIONAL CREDENTIALS

**GLOBAL ACADEMY OF TECHNOLOGY**                                                                        *2021- Current*

*B.E. Artificial Intelligence and Data Science; **CGPA: 8***

**SRI CHAITANYA TECHNO SCHOOL**

*Class 12 (PCMB) with an **87%** aggregate - CBSE*                                                       *2021*

*Class 10 with an **82%** aggregate - CBSE*                                                              *2019*

## SKILL SUMMARY

- Programming Languages     : Python, SQL, C#
- Frameworks & Libraries     : Pandas, NumPy, TensorFlow, Keras, Scikit-Learn, Matplotlib, NLTK, Spacy, Gensim
- Tools                                : Excel, MySQL, GitHub, Tableau, PowerBI, ChatGPT, M365 Copilot
- Cloud                              : Google Cloud Platform, Microsoft Azure

## WORK EXPERIENCE

**AI ENGINEER INTERN | GAS TURBINE RESEARCH AND ESTABLISHMENT (GTRE), DRDO**          *Sept'24 - Dec'24*

- Developed predictive analytics models for Engine Health Monitoring using sensor data from turbine engines.
- Processed .dat files and applied time-series forecasting using LSTM, GRU, XGBoost, and LGBM.
- Improved model performance with Hyperparameter Tuning (Optuna, HyperOpt), achieving a 30% reduction in MAE.
- Built an interactive GUI for real-time sensor data visualization and anomaly detection.

## PROJECTS

**Malware Classification using ANN  | LINK**                                                             *- July'24*

- Designed a malware classification system using Artificial Neural Networks (ANN).
- Achieved 94.32% classification accuracy, improving cybersecurity defenses.
- Implemented feature engineering techniques to enhance model generalization.

**Pothole Detection Using various CNN architecture | LINK**                                             *- August'24*

- Developed a deep learning model using CNN architectures (AlexNet, ResNet, VGG16) for pothole detection in smart cities.
- Achieved 80% accuracy and integrated Explainable AI (LIME, SHAP) for model transparency

**Weather App Using HTML, CSS and JavaScript | LINK**                                                   *- September'24*

- Developed a weather application that retrieves and displays real-time weather data for any city.
- Implemented a responsive UI and integrated API calls for real-time data updates.

## COURSES AND CERTIFICATIONS

**ChatGPT Prompt Engineering for developers by OpenAI & DeepLearning.AI - July 2024**          CERTIFICATE

Mastered techniques to optimize AI-driven prompt generation for enhanced application performance.

**JPMorgan Chase & Co. Excel Skills Job Simulation on Forage - August 2024**          CERTIFICATE

Gained expertise in data visualization using Excel and PowerPoint by creating impactful charts and interactive dashboards.

**Career Essentials in Data Analysis by Microsoft & LinkedIN - September 2024**          CERTIFICATE

Acquired key skills in data analysis techniques and tools for informed decision-making.

**Microsoft Copilot for productivity by Microsoft & LinkedIN - September 2024**          CERTIFICATE

I've learned to streamline workflows, refine documents and presentations, and enhance collaboration with AI-powered tools.

**Google AI Essentials - September 2024**          CERTIFICATE

Use generative AI tools to help develop ideas and content, make more informed decisions, and speed up daily work tasks.

**Data Science for Engineers by IITm - September 2023**          CERTIFICATE

Earned Elite certificate along with comprehensive knowledge in data science methodologies and their application.

## ACHIEVEMENTS

**NASA Space Hotel and Tourism Contest 2018** – Secured Grade 9 **Second Prize** as part of a team project on space hotel design.

Carried out extensive research on Space Hotels to boost space colonization. Selected for a facilitation to visit NASA, but unable to attend due to personal reasons.