# **Ashok Pitta**

ashokkumarpitta555@gmail.com 📞 07379252988 👂 80 Hoyle Street, Sheffield 3

in linkedin.com/in/ashok-pitta-ai

#### **PROFILE**

Data Scientist and Python Developer with experience in large-scale data analysis, predictive modeling, and NLP. Skilled in Python, SQL, TensorFlow, PyTorch, and HuggingFace, with hands-on expertise in LLMs, RAG, and HPC-based scalable ML. Currently pursuing an MSc in Artificial Intelligence at the University of Sheffield, combining academic research with industry-focused data science applications

#### **EDUCATION**

**Master of Science** 

The University of Sheffield

• Artificial intelligence with a 2:1 degree

09/2024 - 09/2025 Sheffield, UK

**Bachelor of Technology** 

Pragati Engineering College ≥

• Electronics and Communication Engineering (ECE)

• CGPA: 8.14/10

07/2018 - 07/2022 Surampalem, India

## **PROJECTS**

### Web Traffic Time Series Forecasting

• Predict how many people will visit 145,000 Wikipedia pages in the future, based on

• Different methods: simple or advanced, spotting unusual patterns, or grouping similar pages

### 02/2025 - 05/2025

#### Flash Flood Intimation Over IoT

11/2021 - 05/2022

- The main objective of the project is to detect rising water levels in a river and intimate that information to the consulting department through IOT.
- Technologies Used: Microcontrollers, IoT sensors, data transmission protocols, and real-time monitoring tools.

## A Retrieval-Augmented Generation Framework for Financial Document Understanding

• FinanceRAG Challenge (2024) – Built a Retrieval-Augmented Generation (RAG) pipeline for financial QA, integrating dense + lexical retrieval, hybrid fusion, multi-reranker ensembles, and LLM-based generation. Achieved nDCG@10 score of 0.58 on benchmark datasets, with RAGAS evaluation on answer relevance, correctness, and faithfulness.

# 02/2025 - 09/2025

## PROFESSIONAL EXPERIENCE

## Python Developer/Data Scientist

Yexponent

05/2022 - 06/2024 Hyderabad, India

- Cleaned, transformed, and visualized large-scale healthcare datasets using Python (Pandas, NumPy), Seaborn, and Matplotlib to uncover actionable insights.
- Conducted exploratory data analysis (EDA) and engineered features to support predictive modeling and machine learning pipelines.
- Designed and delivered interactive dashboards and automated weekly reports to clients and stakeholders, enabling data-driven decision-making.
- Collaborated with cross-functional teams to translate business problems into data-driven solutions and improve healthcare outcomes.

#### **SKILLS**

#### **Programming**

• Python, Java, HTML, and CSS

#### **Data Science & Analytics**

 Data Science with Python, Exploratory Data Analysis (EDA), and Power BI

#### Frameworks & Libraries

PyTorch, TensorFlow, HuggingFace, scikit-learn, SciPy, and Jupyter

#### High-Performance Computing (HPC)

• Experience with distributed training on HPC clusters (SLURM, GPU nodes), Parallelization (multi-core CPU/GPU computing), and scaling ML pipelines with PySpark & big data architectures

#### **Databases**

• Oracle SQL, Excel

#### Machine Learning & AI

 Scalable Machine Learning, Natural Language Processing (NLP), Text Processing, Neural Networks, reinforcement learning, Transformers, and Deep Learning

#### LLMs & Advanced AI

 Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), and Model deployment & optimization

## IoT & Emerging Technologies

• Hands-on experience with IoT-based systems and ETL (Extract, Transform, Load) pipelines

#### **LANGUAGES**

<b>English</b> IELTS 7 band	• • • •	<b>Telugu</b> Mother Tongue	• • • • •
Hindi	• • • • •	Spanish	• • • • •