🌙 +91-9981221595 🛛 aman1283871@gmail.com 📊 Aman Gupta 🌐 <u>metal0bird.com</u> 👩 github.com/metal0bird

man Gupta

Education

- VIT Chennai B.Tech CSE with specialization in AI and Robotics
- St. Xavier's School Bhopal CBSE 12th grade
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Experience

Center for Cyber-Physical Systems

Summer Research Intern

- Deployed an app that give crop suggestions based on location and satellite images considering over 25 attributes.
- Discovered precise crop suitability and cultivable land using generative AI models with an accuracy of 92%.
- Synthesized research findings from diverse sources, and published a research paper, documenting the progress.

Center for Advanced Data Science

Research Intern

- Utilized Robocorp's web recording tool, generating 50 reusable keywords for various test steps.
- Leveraged Robocorp's RPA capabilities and Python libraries to build a robust automated testing framework.
- Freed up 24 developer hours per week (equivalent to 1.2 full-time developers) for core development tasks.

Projects

Netflix Alchemy Engine | PySpark, SQL, Azure Databricks, Azure Data Lake, NLP

- Designed and implemented an automated ETL data pipeline using Azure data engineering tools with orchestration.
- Reduced data transformation and ingestion time by 70% through parallelization techniques and ADF scheduling tools.
- Integrated Azure Cognitive Services for developing a recommendation system for Netflix shows with 89% convergence.

Finance Portfolio Optimization AI | Python, Gym, scikit-learn, Reinforcement Learning, PyTorch

- Engineered an trading environment using Gym and OpenAI to make informed trading decisions with 87.2% accuracy.
- Evaluated performance over a backtesting period, achieving return of 18% compared to a buy-and-hold strategy's 10%.
- Tested the system with live trading data, after training it with 1,00,000 data points using python RL libraries.

Risk Assessment System | TensorFlow, Pandas, MySQL, Sentiment Analysis

- Designed a hybrid LSTM-RNN model, achieving 92.1% accuracy for anxiety and 93.9% for depression prediction.
- Reduced text noise and inconsistencies by 25% through stop-word removal, stemming, and lemmatization.
- Increased model generalizability by 12% on a held-out dataset from a different platform, demonstrating its adaptability.

Online Streaming Analytics | R, Numpy, Pandas, Data Analytics, EDA

- Built a Random Forest model to predict high-growth streamers with 82% accuracy, helping sponsors find future stars.
- Discovered a correlation between viewer engagement and streamer follower growth rate (Pearson's r = 0.81).
- Identified a potential market opportunity for a Twitch analytics tool for streamers, leveraging data visualization.

Publications

• GIS-Based Discovery of Fertile Land, Weather APIs, and GPT Crop Suitability Analysis	(under review)
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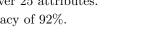
• A New Security Mechanism for Secured Communications Using Steganography and CBA **Research** paper

Achievements / Certifications

DeepLearning.AI : TensorFlow Developer Certification	Certificate
TechnoVIT'22 hackathon winners: 24 hour offline hackathon during biggest tech fest by VIT	Certificate
Meritorious Award: achieving a top 10 ranking for academic excellence within my branch	Certificate
NPTEL : Google cloud computing foundations	Certificate

Technical Skills

Languages: Python & R (proficient), SQL (fluent) Libraries and Frameworks: Sklearn, TensorFlow, Keras, R Shiny, Pandas, Matplotlib, PyTorch, OpenCV Technologies: MySQL, Docker, GitHub, Apache Spark, PySpark, Azure Databricks



June 2021 - July 2021

Certificate

Github

Github

Github

Github

Certificate

May 2023 - June 2023

(CGPA:9.11) (2020 - 2024)

(Percentage : 88.0) (2019)(Percentage : 87.4) (2017)