Ankita Singh

/ankitasingh15.102@gmail.com | /ankita-singh | /Annkkitaaa | /ankitasingh | /aannkkiittaa | +91-7208609380

Education

Indian Institute of Technology (ISM) — Dhanbad, Jharkhand
Master of Science in Mathematics and Computing — *Aug. 2022 - May 2024*
CGPA: 3.3/4.0 (4-point scale)

Patna Women's College — Patna, Bihar
Bachelor of Science in Mathematics (Hons.) — *Apr. 2019 - Apr. 2022*
CGPA: 3.9/4.0 (4-point scale)

Technical Skills

Languages: C++, Python (NumPy, Pandas, Matplotlib, Streamlit, Scikit-learn), Go, SQL
Frameworks & Tools: Docker, TensorFlow, Web Scraping, Tableau, Excel
Databases: PostgreSQL, SQLite, GCP Storage, BigQuery
Statistical Analysis: Probability, Inferential Statistics, Time-Series Analysis
Machine Learning: Supervised and Unsupervised Learning, Natural Language Processing, Semantic Analysis
Analytical Skills: Data Analytics, Data Visualization Tools, Data Mapping, Data Processing, Data Insights
Blockchain: Cryptography, Decentralized Finance (DeFi), Blockchain Fundamentals, Distributed Systems

Experience

Infinite Analytics — Apr. 2024 – Present
Data Scientist, Internship (Mumbai, Maharashtra, India)

- Engineered a Q-learning model to aut0mate the optimisation and simulation process of developing campaign strategies, improving decision-making accuracy by 14%, increasing ROI by 25%, and reducing campaign costs.
- Evaluated campaign metadata, identified KPIs, and refined strategies, enhancing campaign efficiency by 21% and decreasing costs by 9%. Also, Collaborated with clients to deliver actionable data-driven insights.

Indian Institute of Technology (ISM) — Jan. 2024 – Mar. 2024
Research Analyst, Internship (Dhanbad, Jharkhand, India)

- Pioneered a Graph Neural Networks-based system for human yoga posture detection, achieving an 18% improvement in recognition accuracy and a 12% decrease in false positive rates.
- Leveraged a dataset of 82 yoga postures to identify key joint locations as network nodes, enhancing posture recognition precision. Applied this joint-based method to boost the robustness and accuracy of pose classification.

Projects

Time Series Cryptanalysis Using LSTM Networks | *Python, Deep Learning* — Aug. 2024 – Sep. 2024

- Implemented Long Short-Term Memory (LSTM) networks for cryptanalysis, focusing on breaking the Caesar Cipher encryption. Predicted plaintext from ciphertext using deep learning techniques.

Sign Language Detector | *Python, Machine Learning* — May 2024 – Jun. 2024

- Created a sign language recognition system using machine learning, which interprets hand gestures from video input and translates them into corresponding text.

Uber Data Analytics Project | *GCP, Python, BigQuery* — Nov. 2023 – Dec. 2024

- Conducted comprehensive data analytics on Uber's dataset, resulting in a 16% improvement in route optimization and a 13% decrease in response times using GCP Storage, Python, and BigQuery.

Achievements

- Selected as a member of the Mathematics Training and Talent Search (MTTS) Programme in 2021.
- Secured All India Rank (AIR) 535 in IIT JAM 2022.

Relevant Coursework

- **Courses:** Data Structures and Algorithms, Database Management System, Data Analytics, Design and Analysis of Algorithms, Data Mining, Probability and Statistics, Inferential Statistics, Distributed System.
- **Online Certifications:** Machine Learning Specialization, Coursera ; CS120: Bitcoin for Developers, Saylor Academy , Credential ID 7391432686AS; PRDV151: Bitcoin for Everybody, Saylor Academy , Credential ID 3760650151AS; Cryptography I, Stanford University .