

Ankita Singh

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EDUCATION

Indian Institute of Technology (ISM)

Master of Science in Mathematics and Computing

CGPA: 3.3/4.0 (4-point scale)

Dhanbad, Jharkhand

Aug. 2022 - May 2024

Patna Women's College

Bachelor of Science in Mathematics (Hons.)

CGPA: 3.9/4.0 (4-point scale)

Patna, Bihar

Apr. 2019 - Apr. 2022

TECHNICAL SKILLS

Languages: C++, Python (NumPy, Pandas, Matplotlib, Streamlit, Scikit-learn), SQL, Typescript, Javascript

Frameworks & Tools: TensorFlow, PyTorch, Docker, Jupyter, Git, VS Code

Statistical Analysis: Probability, Inferential Statistics, Time-Series Analysis, Performance Metrics, System Evaluation

Machine Learning: Supervised and Unsupervised Learning, Natural Language Processing, Semantic Analysis

AI & Agent Development: LangChain, AutoGPT, RAG, Prompt Engineering, Task Decomposition, LLM Systems

Analytical Skills: Data Analytics, Data Visualization Tools, Data Mapping, Data Processing, Data Insights

Blockchain Technology: Ethereum Protocol, Starknet, DeFi, Smart Contracts, Distributed Systems

Cryptographic Systems: Zero-Knowledge Proofs, zk-SNARKs, zk-STARKs, Polynomial Commitments, FRI Protocol

Professional Capabilities: Technical Documentation, Research Communication, Knowledge Sharing, Client Relations

EXPERIENCE

Networth Corp

Oct. 2024 – Present

Data Scientist, Fulltime (Bangalore, Karnataka, India)

- Developed document processing system using Python, implementing custom chunking algorithms that processed 1000+ documents monthly with 95% accuracy in content extraction.

Infinite Analytics

Apr. 2024 – Sep. 2024

Data Scientist, Internship (Mumbai, Maharashtra, India)

- Led optimization of 5+ marketing campaigns, analyzing 10K+ customer interactions to enhance campaign efficiency by 21% and reduce costs by 9%. Built automated reporting pipeline for daily campaign metrics, reducing manual analysis time by 60% and implementing A/B testing across 5 key performance indicators.

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.

PROJECTS

ML Zero-Knowledge Proof System | Python, Cryptography, ZKP

Nov. 2024 – Dec. 2024

- Implemented a privacy-preserving system combining zero-knowledge proofs and machine learning, implementing autonomous verification protocols for model performance with cryptographic commitments and digital signatures.

DeFi Risk Analysis System | Blockchain, ML

Aug. 2024 – Sep. 2024

- Developed a system for DeFi risk assessment using machine learning, implementing real-time data processing from Ethereum blockchain and smart contract analysis for decentralized decision-making.

E-Commerce RAG Chatbot | Python, LangChain, RAG, NLP

Jun. 2024 – Jul. 2024

- Architected an autonomous conversational agent using RAG architecture, implementing task decomposition and semantic search capabilities that improved query response accuracy by 85% and reduced latency by 40% across product catalogs and order management workflows.

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; Cryptography I, Stanford University [↗](#); Decentralized Applications (Dapps), Coursera [↗](#); Blockchain Basics, Coursera [↗](#); Smart Contracts, Coursera [↗](#).