Anusha Mahesh

[LinkedIn](#)   • am4556@g.rit.edu   • Rochester,NY

SUMMARY

Master's student in Computer Science at Rochester Institute of Technology with a focus on machine learning, data analysis, and AI systems. Gained hands-on experience through an ML internship and graduate projects involving predictive modeling, federated learning, and computer vision. Comfortable working with real-world datasets, building and evaluating models, and collaborating on team-based projects. Actively seeking Summer 2026 internship opportunities in ML, AI, or data analytics.

SKILLS

Programming Languages:Python, Java, C++, SQL

Machine Learning & AI: Machine Learning, Supervised Learning, Classification Algorithms, Feature Engineering, Model Evaluation, Federated Learning, Computer Vision

Libraries & Frameworks: NumPy, Pandas, scikit-learn, PyTorch, OpenCV

Data Analytics: Data Analysis, Statistical Analysis, Data Preprocessing, Exploratory Data Analysis

Databases & Tools: MySQL, Git, GitHub, VS Code, HTML, CSS, Jupyter Notebook

EXPERIENCE

Machine Learning Intern   Aug 2023 - Oct 2023

Prinston Smart Engineers | Bengaluru, India

- Developed and evaluated supervised machine learning models to predict cancer risk using structured healthcare datasets
- Performed data preprocessing, feature engineering, and exploratory data analysis on **1,000+ patient records** with clinical and lifestyle attributes
- Implemented and compared classification models including Random Forest and Support Vector Machines, evaluating performance using accuracy metrics and confusion matrices

PROJECTS

Personalized Federated Learning (FedPer) for Non-IID Data   Dec 2025

Graduate Project | Rochester Institute of Technology

- Implemented personalized federated learning (FedPer) by partitioning models into shared base layers and client-specific personalization layers to address non-IID data challenges
- Designed and trained a ResNet-34 FedPer architecture on CIFAR-10 across **8 clients** with controlled non-IID class distributions (k = 4, 8, 10)
- Achieved **86.44% accuracy** under extreme non-IID settings (k = 4), while reducing communication overhead by **15%**by aggregating only base layers

Zero-Bit Biometric Watermarking for Document Security   Dec 2023

Academic Project | Bangalore Institute of Technology

- Designed a zero-bit biometric watermarking system to ensure document integrity using **iris and fingerprint biometric data**
- Implemented encryption-based watermark embedding techniques to protect documents against tampering and unauthorized modifications
- Evaluated the robustness of the watermarking approach under common document alterations to validate security and reliability

EDUCATION

Rochester Institute of Technology (RIT), Rochester, NY   Jan 2025 - May 2027

Master of Science in Computer Science(GPA:GPA: 3.84 / 4.00)

Relevant Coursework: Foundations of Artificial Intelligence, Introduction to Machine Learning, Foundations of Computer Vision, Algorithms & Complexity, Engineering Cloud Software Systems