

Niharika Pasham

+15133990268 | pashamna@mail.uc.edu | Cincinnati, Ohio | [linkedin.com/in/niharika-pasham-ab850522a](https://www.linkedin.com/in/niharika-pasham-ab850522a)

Education & Certifications

University of Cincinnati (UC), Cincinnati, OH

Master of Science, Information Technology

Aug 2023 – Dec 2024, GPA - 3.8/4.0

Vidya Jyothi Institute of Technology (VJIT),

Hyderabad, TS, India

Bachelor of Technology, Computer Science and Engineering

Jul 2019 - Jul 2023, GPA - 3.5/4.0

Google cloud program certification: awarded for completing

Cloud Engineering Track by **GOOGLE Database**

Programming with SQL: by ORACLE

PCPA: Programming Essentials in Python: by CISCO

CLA: Programming Essentials in C: by CISCO

Skills

Programming Languages: C, Python, SQL, Java, JavaScript, HTML, CSS, XML

Artificial Intelligence and Machine Learning: MLOps, Reinforcement Learning, MLFlow, Scikit-Learn, OpenCV, NumPy, Pandas, Data Science, Data Pipelines, Model Deployment on Scalable Platforms, Hyperparameter Tuning

Data Visualization Tools: Tableau, Power BI

Tools, Platforms and OS: SQL, Git, GitHub, Jupyter Notebook, Docker, Apache Airflow, DBT, Linux/Unix, Windows, MacOS, Networking

Cloud and Database: Google Cloud Platform, AWS, AWS S3, AWS Lambda, Redshift, MySQL, PostgreSQL, RDS

Data Management: Large Datasets, Structured Datasets, Unstructured Datasets, Cloud-Based Data Management

Programming Languages: Python, SQL, Java, JavaScript, HTML, CS

Work Experience

University of Cincinnati, Cincinnati, Ohio

Aug 2024 - Dec 2024

Machine Learning Project

Segmented customers based on purchasing behavior using advanced machine learning models, enhancing marketing strategies.

- Developed machine learning clustering models, including K-Means, Hierarchical Clustering, and DBSCAN, to classify customers based on purchasing patterns, profit contribution, and sensitivity to discounts.
- Performed data cleaning and exploratory data analysis (EDA) to optimize clustering accuracy and provided insights to support targeted marketing strategies and personalized customer outreach.

University of Cincinnati, Cincinnati, Ohio

Jan 2024 - May 2024

Internal Affairs Chairperson

- Conducted workshops on data analysis, focusing on preprocessing, feature engineering, and SQL proficiency to improve machine learning workflows.
- Streamlined communication across five machine learning projects, enhancing collaboration and reducing project turnaround time by 25%.
- Represented ITSA externally, honing skills in presenting analytical findings and driving team efficiency.

NayVri Technologies, Hyderabad, TS, India

Dec 2022 - May 2023

Machine Learning Intern

- Directed end-to-end development of machine learning models, including data acquisition, cleaning, and integration, ensuring high data quality and scalability.
- Enhanced model performance through hyperparameter tuning, rigorous evaluations, and cross-team collaboration to drive continuous improvement.
- Gained hands-on experience with **cloud-based machine learning platforms** and **ETL concepts**, contributing to streamlined workflows and efficient data handling.

Projects

Plautus (notes and password manager)

April 2024

- Developed a machine learning model using TensorFlow to classify emotions (happiness, sadness, neutrality) from speech audio, improving accuracy from 36.79% to over 70%.
- Utilized libraries like librosa for feature extraction (MFCCs) and matplotlib for data visualization, demonstrating the potential of ML in emotion detection for applications in mental health and sentiment analysis.
- Implemented **data preprocessing** and **feature engineering** techniques to clean and process audio data, optimizing the model's performance for real-world applications such as mental health.

Plautus (notes and password manager)

Aug 2022 - Oct 2022

- Developed the PLAUTUS Android app for secure password management with user authentication, collaborating with the team and UI/UX Designer to ensure seamless implementation and an intuitive, visually appealing interface.