Dhanush Reddy Chirra

704-490-9080 | dhanushreddychirra@gmail.com | linkedin.com/in/dhanushrdy | github.com/chirradhanush

Education

University of North Carolina at Charlotte — Charlotte, NC
Master of Science in Computer Science — *Aug. 2024 – Dec 2025*

Vardhaman College of Engineering — Hyderabad, India
Bachelor of Technology in Computer Science and Engineering — *Dec. 2020 – Apr 2024*

Experience

Research Assistant — Jan 2025 – May 2025
UNC Charlotte — *Charlotte, NC*

- Developed a Generative AI-driven retrieval system using LangChain and FAISS to analyze historical athlete performance and generate insights for coaching strategies
- Built custom LLM-based question-answering models to enable interactive analysis of athlete training data
- Led data cleansing and preprocessing using Python and SQL, improving data reliability by 50percent for performance tracking
- Developed an interactive Tableau dashboard to track performance trends, training progress, and real-time competition results

Projects

Linked Insight | *Python, Streamlit, Langchain* — Feb 2025 – May 2025

- Built a LinkedIn profile screening tool enabling recruiters to evaluate candidates with concise summaries and skill-based insights powered by Generative AI.
- Enhanced recruiter efficiency with automated Q/A, real-time profile parsing, and context-aware responses using Gemini models.
- Designed an intuitive, user-friendly interface with dynamic input/output fields, ensuring seamless interaction and enhanced candidate evaluation.

Flight Price Analysis Dashboard | *Python, SQL, Apache Airflow* — Sep 2024 – Dec 2024

- Developed an interactive dashboard with Tableau and Power BI to analyze and predict flight prices, combining data from AWS Redshift and Snowflake.
- Automated data extraction and transformation using Python, SQL, and Apache Airflow to ensure seamless dashboards.
- Identified hidden patterns and improved query performance in Teradata and Athena to analyze airfare trends by leveraging scatter plots for predictive modeling and heat maps for price variations.

Chess Game with Speech Instructions | *Python, Natural Language Processing* — Apr 2024 – June 2024

- Crafted a speech-guided Chess experience, allowing users to play via verbal commands.
- Implemented NLP to interpret spoken instructions and translate them into machine-executable actions.

Library Management System | *Java, MySQL, Eclipse* — Jan 2024 – Mar 2024

- Designed and developed a Java-based application for efficient library digitization.
- Allowing users to effortlessly purchase and return books online.

Technical Skills

Programming: Python, SQL, C, Java
Web Development: HTML, CSS, JavaScript, FastAPI
Visualization: Tableau, Matplotlib, Seaborn, Git
Databases: MySQL, Oracle, SQL Server, PostgreSQL, Snowflake, MongoDB, Cassandra
Data Analysis Tools: Microsoft Excel, Word, Access, Powerpoint, Outlook
Cloud Infrastructure: AWS (S3, EC2, IAM, Lambda, Athena, Redshift, Glue, DynamoDB), Azure
Generative AI: LLMs, Fine-tuning techniques, Langchain, HuggingFace
Big Data Ecosystem: Apache Spark, Hadoop, Airflow
Data Processing: Numpy, Pandas, Pytorch, Tensorflow, NLP, Deep Learning