RIDDHI GOSWAMI

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PROFILE SUMMARY

Computer Science Engineering student with a CGPA of 9.974 and recipient of the UAE Golden Visa for 'Distinguished Student.' Passionate about Data Science, IoT, and ML/AI applications, with leadership experience in Google Developer Student Club and IEEE. Adept at problem-solving, database management, and leading tech workshops. Skilled in teamwork, leadership, and simplifying complex concepts. Actively seeking internship opportunities to contribute my technical expertise and collaborative spirit.

EDUCATION

B.E. Computer Science Engineering & Minor in Data Science
BITS Pilani, Dubai Campus

CGPA: 9.974
Relevant coursework: Machine Learning, Foundations of Data Science, AI, Data Mining, Object Oriented Programming
Academic Accolades: First in my batch (2023-2024)

TECHNICAL SKILLS

Programming	Python, Java, HTML, CSS, Javascipt, C, C#, .NET
Databases	MySQL, SnowflakeSQL
Data Analysis	Pandas, Polars, MS Excel
Data Visualisation	Plotly, PyGWalker, Matplotlib, Seaborn
Dashboards	PowerBI, Dash, Streamlit, PyShiny
AI & ML	Numpy, Scipy, Sklearn, OpenCV, Spacy, NLTK, Tensorflow, Keras
Electronics & IoT	Arduino, ROS, ROS2

WORK EXPERIENCE

Revenue Optimization and Distribution Intern JUN, 2023 - AUG, 2023
Emirates Group HQ, Dubai

- Developed apps using **Plotly**, **Dash**, and **Streamlit** for data visualization and analysis.
- Used **Snowflake cloud database** to store, query, and handle large-scale datasets efficiently.
- Individual **ML** Project: Handled a **500M** row dataset, optimizing and parallelizing code. Achieved prediction of flight sell-out dates with a mean absolute error of less than two days.

Software Developer - Structure Team JUN, 2024 - AUG, 2024
Jacobs, Dubai

- Developed apps using **.NET 8.0 WPF**, **PyShiny** for handling calculations, and visualisations and kept the user interface dynamic and responsive to inputs. Understood how custom components can be built by integrating **Grasshopper API**
- Explored **NLP** models like **Seq2Seq**, **BERT**, and **fuzzy string matching** to enforce corporate naming conventions
- Gained insight into **Azure DevOps**, **Agile** management framework, using **design patterns** and **refactoring**

MISCELLANEOUS EXPERIENCE

Professional Assistant - Computer Architecture SEPT 2024 - current
Computer Science and Engineering Department, BPDC

Management Lead SEPT 2024 - current
Google Developers Group - BPDC Chapter

Event Manager SEPT 2023 - AUG 2024
IEEE - BPDC Chapter

Software Team Member SEPT 2023 - AUG 2024
IFOR (Intelligent Flying Object Reconnaissance) - BPDC

CERTIFICATIONS

More certifications on my LinkedIn Profile

- HarvardX CS50's Introduction to Artificial Intelligence with Python (Jul 2024)
- Neural Networks and Deep Learning, issued by DeepLearning.AI Academy (Jan 2024)
- Structuring and Managing Machine Learning Projects, issued by DeepLearning.AI Academy (Jan 2024)
- Microsoft Learn AI Skills Challenge (Aug 2023)
- HarvardX CS50x Professional Certification (Jan 2023)
- Postman API Student Expert + Campus Postman Student Leader

PROJECTS

More projects on my Github

Voice Controlled Mobile Bot (Cross Department Research Funded)

This project integrated (Natural Language Processing) **NLP** and the Robot Operating System (**ROS**) to facilitate user interaction with a Turtlebot3, ROSbot XL through voice commands. It employs the **WhisperAPI** and **GPT-4o** to process and understand natural language inputs. It uses **Elevenlabs** for dynamic text-to-speech conversion, demonstrating how the robot can respond to commands vocally based on the input received.

Entity-Relation Identification from Documents

This project taught me how to work with **Spacy** and the Natural Language Toolkit (**NLTK**) to extract entity relations from text paragraphs. The primary objective is to construct detailed knowledge graphs that capture the relationships between various identified entities. These knowledge graphs serve as a foundation for translating complex entity relationships, including many-to-one and one-to-many associations, into formal specifications in the **Isabelle-HOL** code.

Anchor Residue Identification

This project involved the identification and analysis of anchor segments within transcription factor binding sites using data from both in vitro and in vivo experiments. Specifically, I used datasets from UniProbe and CIS-BP databases, which include in vitro data from protein-binding microarrays and SELEX, as well as in vivo data from ChIP-Seq. Through this, I have gained experience in **computational biology**, **algorithm** development, **data analysis**, and bioinformatics **web development**.