# RIDDHI GOSWAMI

+971502563195

f20210017@dubai.bits-pilani.ac.in

<u>Portfolio Link</u>

### 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, Al, 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** PowerBl, 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** Emirates Group HQ, Dubai

JUN, 2023 - AUG, 2023

- 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

### CERTIFICATIONS

- HarvardX CS50's Introduction to Artificial Intelligence with Python (Jul 2024)
- Neural Networks and Deep Learning, issued by DeepLearning.Al Academy (Jan 2024)
- Structuring and Managing Machine Learning Projects, issued by DeepLearning.Al Academy (Jan 2024)
- Microsoft Learn Al 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-40** 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.