#### Contact

81471 25702 (Mobile) priyarosev949@gmail.com

www.linkedin.com/in/priyanka-rose-varghese (LinkedIn)

## Top Skills

Google Cloud Platform (GCP)

Docker

Google Kubernetes Engine (GKE)

#### Certifications

Machine Learning A-Z: AI, Python & R + ChatGPT Prize [2024]

Generative AI with Large Language Models

#### Honors-Awards

First Place Winner, Poster Presentation at Kagada-2022

First Prize Winner, a Backend Hackathon: HashltOut, during Inspiron-2022

# Priyanka Rose Varghese

CS @Columbia University | ML & Robotics | Dell Technologies New York, New York, United States

## Summary

I'm a tech enthusiast with a big love for music, art, and astrophysics. When I'm not buried in code or fine-tuning models, you'll probably find me jamming out to some tunes, sketching, or gazing up at the night sky and pondering the universe's secrets. These passions keep me grounded and spark the creativity that I bring into everything I do.

At Columbia University, where I'm pursuing my Master's in Computer Science, I'm working on some exciting projects—like improving cancer detection using advanced deep learning models. But beyond the algorithms, I believe that science, tech, and art all share the same heartbeat: curiosity, exploration, and pushing boundaries.

I'm always up for a good chat about anything from machine learning to music theory, or even the wonders of space. Let's connect and talk about everthing exciting in the universe.

# Experience

NYC Department of Health and Mental Hygiene Project Intern February 2025 - Present (6 months)

New York, New York, United States

#### Columbia University

1 year

Teaching Assistant
January 2025 - Present (7 months)

New York, United States

COMS 6998E 003: Advanced Spoken Language Processing
Assisted in grading and supporting students in Advanced Spoken Language
Processing (Taught by: Prof. Julia Hirschberg), a graduate-level course
focused on speech processing techniques and algorithms.

Student Research Assistant

#### August 2024 - January 2025 (6 months)

New York, United States

- 1. Integrated a Quantum ESPRESSO-based calculator into a pipeline to compute material properties and utilized these properties to train models like Schnet for accurate prediction of material characteristics, including energies.
- 2. Explored various machine learning models to evaluate their scalability for protein biomarker detection in cancer, assessing their potential for improving diagnostic accuracy.

Dell Technologies
Data Analyst
February 2024 - June 2024 (5 months)
Bengaluru, Karnataka, India

Developed web crawlers using Scrapy and Selenium to gather data from competitor websites for market comparison and insights.

Converted VBA macros to Python, focusing on automating and segregating data processes.

#### **UVCE**

Undergraduate Research Assistant September 2023 - June 2024 (10 months) Bengaluru, Karnataka, India

- Implemented and trained deep learning models using ResNet50 V2, VGG19, MobileNet V3, and DenseNet201 architectures to detect abnormal cervical cells in the Sipakmed dataset.
- 2. Utilized Local Interpretable Model-agnostic Explanations (LIME) to provide visual interpretations of the models' predictions, making them understandable to medical professionals.
- 3. Achieved a balance between accuracy and interpretability, ensuring that the Al models could be trusted in clinical environments.

Dell Technologies Summer Intern May 2023 - June 2023 (2 months) Bengaluru, Karnataka, India

Developed an Al-driven Chatbot that improved user interaction with DELL's data resources, streamlining access to critical information and enhancing overall data utilization. Key responsibilities included:

- 1. Architecting and implementing the chatbot's conversational flow and natural language understanding (NLU) capabilities using RASA.
- 2. Integrating the chatbot with DELL's Data Mart to enable real-time data retrieval.
- 3. Crafting and optimizing DAX queries to ensure efficient and accurate data extraction.

# Education

### Columbia University

Master of Science - MS, Computer Science · (August 2024 - December 2025)

#### **UVCE**

Bachelor of Technology - BTech, Computer Science · (2020 - 2024)

## Zero To Mastery Academy

Artificial Intelligence · (April 2022)