# ARUSH SHARMA

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## Linkedin | LeetCode | GitHub

#### EDUCATION

Manipal University

Jaipur, Rajasthan

Computer and Communication Engineering Bachelor's of Technology

November 2020 - July 2024

CGPA: 8.54

Mount Carmel School Senior Secondary Education Dwarka, New Delhi July 2017 - March 2019

EXPERIENCE

## PGAGI | AI/ML Intern

February 2024 - March 2024

- Key member of the chatbot development team specializing in solutions for online store owners.
- Engaged in all stages of development, ensuring adaptability to evolving project needs and leveraging emerging technologies for impactful solutions.
- Additionally, participated in report generation and vector database construction, utilizing data insights to refine chatbot performance.

## C4GT | Open Source Contributor

July 2023 - August 2023

- Upgraded Keycloak from v7 to v20 within Sunbird Learn project, enhancing user authentication and authorization.
- Established a local development environment for efficient testing and development.
- Conducted rigorous testing to ensure compatibility and security.

SKILLS

Programming Languages: C++, Python

Libraries/Frameworks: HTML5, CSS, Pandas, Matplotlib, OpenCV, NumPy, Pytorch

Tools / Platforms: Git, Docker, Linux, PostgreSQL

PROJECTS / OPEN-SOURCE

### Automatic Attendance using Facial Recognition | Link

Python, Streamlit, NumPy, OpenCV

- Developed an automated attendance system using face recognition technology to streamline and expedite the attendance-taking process for both educators and students.
- Implemented a Python script integrated with computer vision libraries to analyze images, identify individuals' faces accurately, and store the names in a CSV file.
- Created a user-friendly web application interface that allows teachers to effortlessly upload class photos, trigger face recognition, and view real-time results.

#### Object Detection and Captioning | Link

Python, Flask, transformers, YOLOv5

- The project utilizes state-of-the-art object detection models like YOLOv5 to identify and classify objects within images uploaded by the user.
- Leveraging advanced natural language processing (NLP) techniques, the project generates descriptive captions for uploaded images.
- Upon processing the uploaded image, the project presents the results of both object detection and image captioning in a structured JSON format.

### Education Chatbot | Link

Python, Gradio, LLM, Vectorstores, RAG

- Developed an education chatbot with PDF upload and query interfaces, employing advanced document processing and vectorization techniques for efficient data storage and retrieval.
- Integrated Gradio framework for user interface development and HuggingFace's "Mistral-7b-Instruct" model for enhanced language understanding, ensuring seamless navigation and effective query responses.
- Achieved improved user experience and accessibility to educational resources through innovative chatbot design, optimizing document processing and leveraging state-of-the-art language models.