

Mayush Kumar

mayush.kumar@students.iiit.ac.in | +91 9971723017 | LinkedIn | Github | Leetcode | GFG

EDUCATION

- Masters of Technology in Computer Science and Engineering *2022-Present*
International Institute of Information Technology, Hyderabad **CGPA: 8.84**
- Bachelor of Technology in Computer Science and Engineering *2017-2021*
GL Bajaj Institute of Technology and Management, Greater Noida **CGPA: 8.51**
- Higher Secondary Certificate (Class 12th) *2016-2017*
Modern School, Noida **Percentage: 89.80**
- Secondary School Certificate (Class 10th) *2014-15*
Modern School, Noida **CGPA: 9.6**

INTERNSHIP

SOFTWARE ENGINEERING RESEARCH CENTER (SERC), IIIT HYDERABAD | PROJECT INTERN | INTERNSHIP LETTER

Guide: Dr. Karthik Vaidhyanathan | May 2023 – July 2023 | Hyderabad, India

- Contributed to Microservice Sustainability Assessment development as a part of research and development team.
- Conducted research on carbon emission measurement techniques for microservices in Docker containers.
- Engineered the Docker Carbon Footprint tool, measuring container carbon emissions via CPU and memory usage.

PROJECTS

MINI SQL ENGINE | C++, INDEXING, PAGING

- Built a compact SQL-like application, serving as an integer-only relational database management system.
- Designed different paging schemes on the basis of application requirements.
- Simulated and implemented real-time paging and indexing mechanisms for efficient data retrieval.

RESEARCH PAPER RECOMMENDATION SYSTEM | PYTHON, FASTAPI, REACT, NODEJS, ELASTICSEARCH, MONGODB

- Created an application facilitating streamlined research paper discovery and recommendation for scholars in specific fields.
- Integrated the backend with pre-trained models, and also contributed to the front-end for user experience.

EIGENFACES - A FACIAL RECOGNITION SYSTEM | PYTHON, PCA

- Developed a facial recognition system utilizing PCA to project face images onto the Eigenfaces feature space and was able to achieve approximately 98 percent accuracy in recognising facial classes.

MINI-TORRENT | C++, THREADING, SOCKET PROGRAMMING

- Developed a peer-to-peer distributed file sharing application featuring a robust tracker for seamless file exchange.
- Implemented piece selection algorithms, and integrated integrity checks for optimizing file sharing efficiency among diverse peers that resulted in receiving chunks with no noisy data.

SKILLS

PROGRAMMING:

C++ • Python • SQL • C

LIBRARIES:

Pandas • NumPy • Matplotlib • Seaborn • Scikit-Learn

FAMILIAR:

MicroServices • HTML • JavaScript

AWARDS &

ACHIEVEMENTS

2023 IIITH Deans List

2022 GATE AIR-778

2021 GATE AIR-1022

2016 Won BEST ORATOR, Modern School

2015 Won BEST DRAMATIST, Modern School

COURSEWORK

Database Management Systems

Algorithms and Data Structures

OOPS Programming

Operating Systems

Computer Networks

Software Engineering

Linear Algebra

Machine Learning

Business Fundamentals

POSITIONS OF

RESPONSIBILITIES

FELICITY STUDENT COORDINATOR

Elected as one of the five student coordinators, and entrusted with the organization of Felicity, the prestigious annual cultural & technical fest at IIIT Hyderabad.

IIC-MHRD Student Coordinator of GL BAJAJ

Selected as one of six student coordinators for the CSE department, I led initiatives to cultivate a startup culture and foster an entrepreneurial ecosystem within the college.

Teaching Assistant for Software Engineering

Selected by Professor to be TA for Software Engineering course and tasked with creation and brainstorming of engaging class activities, assignments, and industry-level projects.