# Saurabh Kumar

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### **Education**

## NIT SILCHAR - M.tech in Artificial Intelligence.

August 2024 - Present

- CGPA: 8.5
- Coursework: Artificial intelligence, Foundation of Machine Learning, Data Science.

Gaya College of Engineering, Gaya - B.tech Computer Science & Engineering. August 2018 – August 2022

- CGPA: 7.86
- Coursework: Computer Architecture, Operating System, DBMS, Data Structure, Engineering Mathematics.

Gulab Memorial College, Bettiah, West.Champaran - Higher Secondary Examination.

May 2014 - May 2016

• Percentage: 76.4

Dolphin Public School, Muzaffarpur - Secondary Examination

May 2014

• CGPA: 9.2

## **Projects**

#### AI Assistant for Task Automation and Data Retrieval

Link: github.com/saurabhkmr1092/AgentAI

Link: Colab Notebook

- **Objective**: To develop a Python-based AI Assistant capable of performing Arithmetic Operations, Executing System Commands and writing Python Scripts.
- Learnings:
  - Designed and implemented a custom system prompt and multi-step AI workflow using planning, action, and observation phases.
  - Gained experience with OpenAI's chat completion API and managing structured JSON-based dialogue.
  - Learned how to integrate external tools like weather API and system command execution within an AI agent workflow.
- Tools Used: Python, OpenAI GPT-40 API, Requests, doteny, os, JSON, CLI, Git & GitHub.

## Data Analysis on MAGIC gamma Telescope Dataset

- **Objective**: Built a classification model to distinguish gamma rays from background noise (hadrons) using the MAGIC Gamma Telescope dataset.
- Learnings: Gained hands-on experience in data preprocessing, model building, and evaluation. Improved proficiency in Python, TensorFlow, and data visualization techniques.
- Tools Used: Python, Scikit-learn, TensorFlow, Pandas, Matplotlib.
- Machine Learning Algorithms: K-NN, Naive Bayes, SVM, Logistic Regression, Neural Networks.

#### **SKILLS**

Languages: C, C++, Python, Javascript, HTML, CSS

Libraries: Scikit-learn, NumPy, Pandas, matplotlib.

FrameWork & Tools: Tensorflow, Git, GitHub.

ML Algorithms: K-NN, Naive Bayes, SVM, Regression techniques, Neural Networks.

## **Certificates & Achievements**

- EICT-IIT Kanpur Certified in PYTHON.
- $\bullet\,$  Elite Certificate of Machine Learning by IIT Madras.