HARSHIT SINGH

 $+91-9205021433 \diamond E\text{-mail} \diamond \bigcirc Github \diamond in Linked In$

EDUCATION

Indian Institute Technology, Madras

Diploma + BSc in Data Science

Expected June 2024

Madras, India

Indian Institute of Information Technology, Guwahati

B. Tech in Computer Science & Engineering; CPI - 8.5

Expected April 2024
Guwahati, India

Sarvodaya Sr Sec School, Kota

Class XI & XII; Percentage - 90.5%

April 2020 Kota, India

OBJECTIVE

A career in research is my goal after completing graduate studies in Computer Science and Engineering. Computer Vision and Natural Language Processing are my areas of interest.

As a highly motivated and inquisitive individual with a strong foundation in the fields of CS and ML, I am seeking a Research Internship that will allow me to leverage my skills in collaboration.

RESEARCH EXPERIENCE

IBM Research AI Lab

May 2023 - Now

Supervisor: Dr. Pin-Yu Chen

· Working on developing an algorithm to Fine-Tune Large Models like Diffusion and GPT with faster speed and lesser Compute resource.

University of Tartu, Estonia

Jan 2023 - April 2023

Supervisor: Dr Rajesh Sharma & Dr. Roshni Chakraborty

· Worked on Fair Summarization Algorithms that can accurately and fairly summarise text for different demographic groups.

IIIT Guwahati Jan 2023 - April 2023

Supervisor: Dr. Soumi Chattopadhyay

· Worked on new state-of-the-art techniques used to improve the Recommendation Systems without using QoS parameters.

TECHNICAL SKILLS

Programming Languages: Python, Java, LaTeX, R and SQL

Tools: Git, Github, Linux

Frameworks: PyTorch, TensorFlow, Keras, Pandas, NumPy, Scikit-Learn, Flask, OpenCV

ACTIVITIES

Robotics and IOT Lead at Google Developers Student Club from August 2022 - May 2023

Mavericks Club Coordinator (Machine Learning Club) from May 2022 - Dec 2022

DU Hacks Hackathon: 2nd Prize Winner

First Lego League: Lead my high school Robotics Team and secured Rank 2 in Delhi/NCR Student Mentor of multiple undergrad students in HITG for the academic year 2022, 2023

PROJECTS

- Deep Learning on Drone: Created an end-to-end model Drone Garbage Detection model for competent authority.
- Computer Vision using Pytorch: Vision tasks Image Segmentation, Object Localization, Neural Style Transfer, GANs implemented in PyTorch.
- Face Recognition for Attendance System using MTCNN: developed a desktop app using Tkinter to train images in live mode.

RELEVANT COURSES

Computer Science: Artificial Intelligence, Machine Learning, Analysis and Design of Algorithms, Data Structures, Programming Languages, Object Oriented Programming, Cloud Computing (AWS) Data Communication, Digital Hardware Design, Business Data Management.

Mathematics: Statistical Methods and Algorithms, Probability Theory, Differential Equations, Linear Algebra, Multi-variable Calculus.