

Manjeet Yadav

CHANAKYA FELLOW

☎ (+91) 8824112835 | ✉ manjeet19@iiserb.ac.in | 🏠 mjayadav7.github.io/Manjeet/ | 💻 github.com/MJYADAV7 | 🔗 linkedin.com/in/manjeet-yadav

Personal Profile

I am a Junior Research Fellow in the Department of Computer Science at the Indian Institute of Technology, Kharagpur. I am proficient in Python programming and have extensive knowledge of data science, machine learning, and artificial intelligence. My research is centered around using artificial intelligence for social good, aiming to solve real-world problems.

Current Research

Developing a Chatbot Framework for Mental Health Diagnosis and Intervention

IISER Bhopal & AIIMS Bhopal

I am developing a chatbot that utilizes artificial intelligence and natural language processing techniques to interact with users. It will collect relevant information and provide preliminary diagnoses for mental disorders. Creating and implementing this chatbot is based on the concept that people have a "Virtual Friend" who assists them in improving their mental well-being.

Leveraging Augmented Reality and Wearable Devices for Indoor Air Quality Improvement

IIT Kharagpur & IIIT Delhi

In this research work, I am developing a novel Augmented Reality (AR) platform that utilizes wearable sensing devices to visualize real-time indoor air pollutants, specifically CO₂. The platform enhances user awareness and interaction with indoor ventilation systems, promoting healthier indoor environments through improved understanding and engagement with air pollution dynamics.

Publications

Fine-tuning Large Language Models for Automated Diagnostic Screening Summaries

Manjeet Yadav, Nilesh Kumar Sahu, Mudita Chaturvedi, Snehil Gupta, Haroon R Lone. COLING 2025 [[Paper](#)]

Unveiling Social Anxiety: Analyzing Acoustic and Linguistic Traits in Impromptu Speech within a Controlled Study.

Nilesh Kumar Sahu*, Manjeet Yadav*, and Haroon R. Lone. ACM Journal on Computing and Sustainable Societies 2024 [[Paper](#)]

Understanding Stress: A Web Interface for Mental Arithmetic Tasks in a Trier Social Stress Test.

Manjeet Yadav, Nilesh Kumar Sahu. ACM INDIAHCI 2023 [[Paper](#)]

Academic Projects

Sports Analytics using Wearable technology

Jan, 2023 – April, 2023

Course project: Internet of Things

This project is designed to assist players in enhancing their performance by furnishing them with comprehensive data on their physical activity during matches or training sessions. The system utilizes an accelerometer and force sensors securely attached to the player's shoe to gather information on their movement, impact, and exerted force. Subsequently, the collected data is analyzed to pinpoint areas for improvement, providing valuable insights to help players develop and refine their skills.

Control a vertical traversing elevator using a microcontroller

July, 2022 – Dec, 2022

Course project: Data science & Machine learning

The project aims to develop a predictive model that leverages documented opening prices of Bitcoin to forecast future price movements. The cryptocurrency market is known for its volatility, and accurate price predictions can provide valuable insights for investors, traders, and other stakeholders.

Education

Indian Institute of Science Education and Research, Bhopal

2019 - 2024

BS-MS in the Electrical Engineering and Computer Science

CGPA: 8.36/10

- Courses: Machine learning, Artificial Intelligence, and Database Management Systems.

Board of Secondary Education Rajasthan, Ajmer

2017 - 2018

Higher Secondary

Percentage: 90.80%

Work & Research Experience

Ubiquitous Networked Systems Lab

Junior Research Fellow

- Augmented Reality-based Pollution Visualization

Kharagpur, West Bengal

June 2024 - Current

Chegg.com

Subject Matter Expert

Bhopal, Madhya Pradesh

Sep 2021 - Current

National Programme on Technology Enhanced Learning

Teaching Assistant

- Hands-on workshop on Internet of Things
- Investigator: Dr. Haroon Rashid Lone

Bhopal, Madhya Pradesh

July 10-15, &

Professional Training and Certification

Courses

- Python Developer
- Full Stack Web Developer
- Data Structure & Algorithms

Technical Skills

AI Technologies Machine learning, Deep learning, Natural language processing

Programming C, C++, Java, Python, Matlab, Javascript, SQL (Data Base)

Miscellaneous Data structure, Web development, App development

Soft Skills Time Management, Teamwork, Problem-solving, Documentation

Skills and Achievements

GATE 2023 Qualified Graduate Aptitude Test in Engineering 2023

Workshop Attend Synergizing Healthcare Services and Affective Computing using Deep Learning workshop

Member Programming Club & Placement Team- IISER Bhopal

Volunteer Innovation Design and Entrepreneurship Bootcamp, Summer Outreach Program IISER Bhopal

JEE 2019 Qualified Joint Entrance Exam Mains & Advance 2019

References

Dr. Sandip Chakraborty

Associate Professor

Department of Computer Science and Engineering

IIT, Kharagpur

Principal Investigator

Dr. Haroon Rashid Lone

Assistant Professor

Department of Electrical Engineering and Computer Science

IISER, Bhopal

MS Thesis Supervisor

Dr. Jasabanta Patro

Assistant Professor

Department of Data Science and Engineering

IISER, Bhopal

Faculty Advisor

I hereby certify that the above information is true and correct to the best of my knowledge.



Manjeet Yadav