

# MADHUR THAREJA

Dual Major ES,CS ♦ madhurthareja1105@gmail.com ♦ [Portfolio](#) [LinkedIn](#)

## EDUCATION

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**Birla Institute of Technology and Sciences Pilani, Pilani**

August 2023 -Present

B.Sc.(H) Computer Science, CGPA: **9.78**

**Indian Institute of Technology, Chennai**

September 2023 -Present

B.S. Electronic Systems, CGPA: **8.97**

**Central Board of Secondary Education**

Class 12: **83.20%**

## EXPERIENCE

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**Indian Institute of Technology Ropar**

May 2024 - July, 2024

*Summer School*

*Ropar, Punjab*

- Successfully completed the projects given including Recommendation Systems, Estimation (Like German Tank in 2 or 3 Dimensions), PageRank using Power Iteration, Simulated Annealing, Data Compression
- Developed the understanding of Computer Vision, Supervised Learning, Self Supervised Learning, Natural Language Processing
- Contributed to peer learning and explained several projects to my peers.

## PROJECTS

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### Gesture Detection

- Engineered a sophisticated gesture detection system incorporating hand raise and nod detection for multiple individuals, utilizing YOLOv8n and MediaPipe. This cutting-edge solution demonstrates advanced accuracy and real-time responsiveness.

### Recommendation Prediction Model

- Architected a sophisticated friendship prediction model employing Matrix Factorization, attaining exceptional precision and markedly elevating the predictive acumen of social network analysis.

### Chatbot for Construction related Questions

- Conceived and developed an intelligent chatbot as part of a collaborative project for a prestigious hackathon organized by the Civil Engineering Department of IIT Madras. This chatbot proficiently answers construction-related queries and meticulously tabulates the responses, demonstrating remarkable utility and efficiency.

## TECHNICAL SKILLS

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<b>Languages</b>	C++, Python, Java, Bash Shell Scripting
<b>Computer Fundamentals</b>	Data Structures, Algorithms, Database Management System
<b>Machine Learning</b>	Numpy, Pandas, Scikit-learn, Regression, Classification and Clustering Algorithms
<b>Relevant Coursework</b>	Electrical and Electronic Circuits, Ordinary Differential Equations
<b>Soft Skills</b>	Problem Solving, Self-learning, Presentation, Adaptability

## CO-CURRICULARS AND ACHIEVEMENTS

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- Participated and cleared Round 1 with **Rank 1** in the Hackathon organised by IIT Madras for Construction Related Question answering ChatBot, the prototype for Round 2 is under evaluation.
- Represented Gurugram in Badminton in the State Championship held in Delhi
- Achieved **Global Rank 1** in Bash scripting challenges and **Gold Badge** in Java Challenges on HackerRank