

Saiyam Arora UG (II Year II Semester) B.Tech. (Electrical Engineering) Contact No: 9729953242 Email: s arora@ee.iitr.ac.in Registration No: 21112092/2024



Area of Interest

Data Structure and Algorithms, Problem-Solving, Software development, Artificial Intelligence, Badminton

_____ Education

Year	Degree/Examination	Institution/Board	CGPA/ Percentage
2023	B.Tech. 2nd Year	Indian Institute of Technology, Roorkee	8.522
2021	Intermediate (Class XII)	SD Public school (CBSE Board)	95.60 %
2019	Matriculate (Class X)	St Thomas School (ICSE Board)	95.20 %

Projects

Path Planning using Reinforcement learning | Models And Robotics Section, IITR

March 2023 - April 2023

December 2022 - Present

May 2022 - Present

• Trained an agent using Q-learning and DQNs to efficiently navigate complex environments with obstacles.

• Leveraged Bellman's equation in the design and implementation of reinforcement learning algorithms to optimize agent

Diagnostic-i An Artificial Intelligence based Medical Diagnostic tool | ShARE, IIT RoorkeeJanuary 2023 - February 2023

- Worked closely with teammates specialising in React, Figma, OpenCV, XGBoost, Reactls and backend technologies.
- Worked on training machine learning and CNN models with more than 60% accuracy.
- Played a key role in advancing the diagnostic capabilities of the platform through deep learning expertise.

Prediction and Analysis of DEM-simulation results | Chemical Department, IIT Roorkee December 2022 - February 2023

- Conducted regression-based prediction and analysis of DEM-simulation results in a vibrated packed bed system.
- Worked on a cord dataset comprising 1000+ rows and 12 columns and extracted valuable insights such as SMI,
- coordination number, and orientation angle of spherical and non-spherical particles
- Contributed to research and development efforts aimed at optimising packed bed systems.

Awards / Scholarships / Academic Achievements

- Secured 99.919 percentile in JEE Mains among 1.2Million aspirants.
- Scored 67294 points in google hash code 2022
- Runners up in Prahar-Intra Bhawan Badminton Tournament, Rajendra Bhawan (2022)
- Winner in Vidroh- Intra bhawan Badminton Tournament, Govind Bhawan (2023)
- 3 time winner, Yamunanagar District Badminton Championship
- ICSE Zonals Badminton Championship Winner
- Qualified for the Main Draws of Haryana Open State Badminton Championship (Boys Doubles U-15)
- Super Genius award in class 12th from SD Public School, Jagadhri

Skills

Computer languages C++, Python

Additional Courses Macro&Micro economics Supervised Machine Learning (online)

Positions of Responsibility & Extra Curriculars

Additional Secretary | Electrical Engineering Student's Society, IIT Roorkee

September 2022 - Present • EESS is the official student body of UG and PG students of the Electrical Department, IIT Roorkee

Contributed to the conduction of various Talks, Podcasts, and events at the Electrical Engineering Department.

Competitive Programming | Online Judges

- Active member on various Online Competitive Programming Judges like Codeforces, InterviewBit, and Leetcode.
- Maximum rating of 1305 on Codeforces (handle: Saiiii09)

Vice President | Geek Gazette

- June 2023 Present • Geek Gazette is the official body of IIT Roorkee publishing semesterly technology-related magazines.
- Collaborating with a team of designers, and participated in brainstorming sessions, ideation, and concept development.
- Effectively communicated and collaborated with cross-vertical teams, ensuring seamless magazine-making process.

Learning Unit Manager | Data Analytics, ShARE IIT Roorkee

- ShARE is the official Consultancy, Analyst and Product Group of IIT Roorkee providing comprehensive training programs.
- Mentoring a team of 7 junior members with Data Analytics skills in the ShARE training program
- Developed a curriculum covering data preprocessing, statistical analysis, machine learning, and data visualization tools

References

Abdul Saleem Mir Assistant professor Indian Institute of technology Roorkee saleemmir@ee.iitr.ac.in

Anshu Anand

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