

# Yash Sehgal

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[Portfolio](#) | [LinkedIn](#) | [GitHub](#)

## EDUCATION

### Indian Institute of Technology, Mandi

B.Tech in Computer Science and Engineering

Himachal Pradesh, India

Expected June 2026

**Relevant courses:** Data Structures and Algorithms, Design of Algorithms, Machine learning, sFormal Language and Autometa Theory, Mathematical Foundations of Computer Science, Information Database Systems, Programming in Python, Probability and Statistics, Statistical Foundations of Data Science

## EXPERIENCE

- **Development internship at Afame Technologies:** [Certificate of Internship](#) , [Letter of Recommendation](#)

## PROJECTS

- **Sorting Visualizer** | [Link for GitHub](#) June, 2024  
*Data Structures and Algorithms, ReactJS, Tailwind CSS* <https://sorting-visualizer-blond.vercel.app/>
  - Built a "Sorting Visualizer" to demonstrate sorting algorithms through animations, implemented 5 sorting algorithms : Bubble Sort, Merge Sort, Selection Sort, Quick Sort, and Insertion Sort for educational purposes.
- **Namaste-Mart(An E-commerce Web App)** | [Link for GitHub](#) June, 2024  
*ReactJS, Firebase, Redux-Toolkit, Tailwind CSS* <https://namaste-mart-opal.vercel.app/>
  - Developed and Hosted a responsive E-commerce Web application using ReactJS, With state management via Redux-Toolkit and ContextAPI, established protected routes for separate types of users.
  - Utilized Google Firebase for real-time database operations and secure user authentication.
- **Efficient Convolution Models for Abnormal Heartbeat Signal Detection** | [Link for GitHub](#) January, 2024  
*Python, Machine Learning, TensorFlow, Keras, Data Science*
  - Developed a Python-based heartbeat analyzer using TensorFlow and Keras to classify ECG data, Enhanced model precision through data augmentation techniques; significantly improved the prediction accuracy upto 99 per cent
- **LLM Chat Bot** | [Link for GitHub](#) January, 2024  
*Generative AI, Langchain, Python*
  - Leveraged a LLM Chatbot using advanced pre-trained models, including Mistral 7b, Mistral 8x7b, Llama2 7b, and Llama2 70b and tried to compare the results for each model.

## SKILLS

- **Languages:** C++, JavaScript, Python, HTML, CSS, SQL, NoSQL
- **Frameworks/Libraries/Tools:** ReactJS, NumPy, Pandas, TensorFlow, Keras, Redux, Redux-Toolkit, Tailwind-CSS, Matplotlib, Git, GitHub, GSAP, Figma
- **Database and OS Platform:** MongoDB, Firebase, Windows, Linux

## ACHIEVEMENTS

- Our Group-68 was selected among the 14 groups for SEED grant from Catalyst IIT Mandi to develop our project into a startup further May, 2024
- Solved 300+ ques on LeetCode, GeeksforGeeks and Interviewbit
- Co-authored a [research paper](#) published in "Texila International Journal of Public Health" with title "Efficient Convolution Models for Abnormal Heartbeat Signal Detection " June, 2024
- Among the Top 15 teams out of 125 in KrackHack'24 Hackathon organised by GDSC IIT Mandi April, 2024

## POSITIONS OF RESPONSIBILITY

- **Core Team member:** SnTC Web Development Team September, 2023
- **Tutor:** Mentored a group of 5 students in the Course IC-102p to make a To-fro memory robot. March, 2024
- **Teaching Assistant:** In course IC-152 : Computing in Data Science August, 2024
- **Team Head:** Miraz'2024 Videography Team,lead a team of 25+ volunteers April, 2024

## CERTIFICATIONS

- **Udemy:** Mastering Data Structures and Algorithms in C++ March, 2024
- **Energy Swaraj Foundation:** Organizer Certificate for the Climate Clock Assembly and Design Workshop March, 2024
- **Linked In:** Certification Of Completion of Course "Introduction to Career Skills in Software Development" June, 2024
- **Ministry of Electronics and IT:** Certificate of participation in "Bootcamp on Drone Technology" July, 2023