

# Deepanshu

3rd Year Undergraduate

Department of Computer Science and Engineering

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📍 Deepanshu18099 | in deepanshu-yadav

## Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2021 - Present	B.Tech	Indian Institute of Technology Kanpur	7.0/10
2021	CBSE(XII)	Yaduvanshi Shiksha Niketan, Narnaul	89.8%
2019	CBSE(X)	Yaduvanshi Shiksha Niketan, Narnaul	90.6%

## Scholastic Achievements

- Secured **All India Rank 1040** in **JEE-Advanced 2021** among 1.4 Lakh candidates, Conducted by IIT Kharagpur.
- Secured **All India Rank 2204** in **JEE-Main 2021** among 10 lakh+ appeared candidates all over India.
- Recipient of Excellence Scholarship from **National Talent Search Examination 2019** conducted by **NCERT**.
- Scored **100 percentile** in **Physics** subject in **JEE-Main 2021** by scoring a maximum possible score 100/100.
- Among **State top 1%** in **National Standard Examination In Junior Science 2018-2019** conducted by IAPT.

## Key Projects

### HealthPlusPlus 📍 | CS253 Course Project

(Jan'23-Apr'23)

**Mentor:** Prof. Indranil Saha (Computer Science and Engineering, IIT Kanpur)

- With a team of 10, Developed an **automated software** for **Health Center** of IITK providing its services online.
- Used rapid development framework **Django** for back-end and its SQL database, **HTML**, **CSS**, **JavaScript** for front-end.
- Executed an end-to-end development process from **SRS** and **Design** document to implementation of automated parts.
- Collaborated with another team for **Beta Testing** to identify and resolve the errors within both team's applications

### CSE-Bubble Processor 📍 | CS220 Course Project

(Jan'23-Apr'23)

**Mentor:** Prof. Urbi Chatterjee (Computer Science and Engineering, IIT Kanpur)

- Framed a **single-cycle processor**, including **Opcode** design, **data path** implementation and **control path** development.
- Implemented **ALU** and **Control Unit** in the top-down approach to develop different modules for different Opcodes.
- Utilized **MIPS-32** code for **Bubble Sort**, converting it to machine code and storing output in data-memory **VEDA**.

### Space Travel System 📍 | CS253 Course-Assignment

(Mar'23-Apr'23)

- Implemented concepts of **Object Oriented Programming** of C++ in a Space Travel System(STS) to efficiently manage interplanetary travel, with automatic initialization of flights and assignment of commanders and astronauts to it.
- Utilized various **Inheritance classes**, **Virtual functions**, **Exception handling** to all classes for proper functioning.
- Completed all functionalities starting from registration of travelers to their space-travel tickets for respective planets.

### Mathematical Tools for Data Science 📍 | Stamatics Society, IIT Kanpur

(Apr'22-Jun'22)

- Learned basics of **Numpy** and **Pandas** libraries for data analysis, **matplotlib** based **Seaborn** for data visualization.
- Applied Seaborn on a dataset of salaries of employees and visualized the trends in their Overtime benefits.

### Full Stack Web Development 📍 | Association for Computing Activities (ACA) Project, IIT Kanpur

(Apr'22-Jun'22)

- Learned basics of web development, using **Bootstrap**, **Javascript**, and how to make **API calls** to a server on cloud.
- Implemented a personal **portfolio** with **user registration and authentication**, and added my details to it.

## Technical Skills

- Programming Languages:** C, C++, Python, Javascript, HTML, CSS, SQL, Verilog HDL
- Libraries/Utilities:** Pandas, Numpy, Django, Seaborn, ReactJS, Bash,  $\text{\LaTeX}$ , AutoCAD, Adobe Illustrator

## Positions of Responsibility

- Head, Web and App** (Udghosh, IIT Kanpur) (Jun'23-Present)
  - Leading a **3-tier team** of 20+ developers building and maintaining platforms for the smooth conduction of festival.
  - Made WebApps fully from Scratch using **ReactJs** and **GSAP** with registration of 6k+ users on the website itself.
  - Used **Node package manager** and **Google-firebase** hosting to host the WebApps 📄 on the respective domains.
- Organizer, Design & Videography** (Udghosh, IIT Kanpur) (Aug'22-Oct'22)
  - Successfully worked with **Digital design** team for creating **UX Designs** for Website, for brochure and posters.
  - Assisted in conducting UNOSQ with 3 tier team and subsequently increased the number of participants.

## Relevant Completed Courses

A\*-Exceptional Performance

Data Structure and Algorithms	Computer Organization	Introduction to Economics*
Software Developments and Operations	Modern Cryptology	Introduction to Electronics
Discrete Maths for Computer Science	Logic for Computer Science	Probability for Computer Science
Fundamentals of Computing	Linear Algebra and ODE	Algorithm-II(Ongoing)

## Extra-Curricular Activities

- Was Academic mentor of course Phy112/115 for session 2021-22, mentoring 30 freshman students in Academic difficulties.
- Bagged 2nd position in **GUESS-IT-MATE** competition organised by Finance & Analytics Club with team of 4 students.
- Active participation in Inter Hall technical competition **Takneek'23**, securing overall 2nd position among other halls.