

Harshit Raj

SOPHOMORE UNDERGRADUATE · COMPUTER SCIENCE AND ENGINEERING

☎ (+91) 79922 71701 | ✉ harshitr@cse.iitk.ac.in | 🏠 1-Harshit.github.io | 📷 1-Harshit | 📺 1-Harshit

Education

Indian Institute of Technology Kanpur

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING - 9.73/10

Kanpur, India

2020 - 2024 (expected)

Jawahar Vidya Mandir, Shyamali

CLASS XII CBSE BOARD EXAM - 96.4%

Ranchi, India

2018 - 2020

DAV Public School, Chatra

CLASS X CBSE BOARD EXAM - 89.0%

Chatra, India

2008 - 2018

Technical Skills

Programming

C/C++, Python 3, Golang, Bash

Web

JavaScript (ES6), React, Django, Flask, Jekyll, HTML5, CSS

Utilities

Linux shell utilities, Git, Docker, Kubernetes, Vim, \LaTeX , PostgreSQL, SQLite

Honors & Awards

2021 **Academic Excellence Award**, Awarded to top 10% of the batch

IIT Kanpur

2020 **All India Rank 934**, secured among 150K shortlisted students in JEE Advanced

India

2020 **All India Rank 3542**, among 1.2 million students in JEE Mains conducted by NTA

India

Projects

IITK Coin - Frontend

IIT Kanpur

with Bhuvan Singla (Y18), Abhishek Shree and Somya Gupta | SNT COUNCIL PROJECT

Sep 2021 - Dec 2021

- Developed Frontend system for a centralised reward based pseudo-coin system in **React-native** for use in IITK Campus.
- Involved **connecting APIs** through axios and saving tokens in **secure-store**. Maintained several states and navigation between screens.
- Developed on **custom UI/UX** made in Figma which involved implementing **bottom sheet, card-based designs** and several forms.

IITK Coin - Backend

IIT Kanpur

Mentor: Bhuvan Singla (Y18) | SUMMER PROJECT, PROGRAMMING CLUB

May 2021 - July 2021

- Developed backend system for a **centralised reward based pseudo-coin system** in **GoLang** for use in IITK Campus.
- Involved Database Management, User **Authentication**, Hashing & Salting and **User Session Validation** with JSON Web Tokens(JWTs).
- Built robust REST APIs that can handle **concurrent** transactions, **multi-level user permissions**, and maintained **ACID properties**.

Full Stack Web Development

IIT Kanpur

SEMESTER PROJECT, ASSOCIATION OF COMPUTING ACTIVITIES, CSE, IITK

April 2021 - June 2021

- Learnt about HTML-5, CSS, JavaScript(ES6), Async Functions, Promises, React, MongoDB, HTTP Requests, HTTP Headers etc.
- Implemented a front-end to connect to APIs of a mock server using asynchronous JavaScript and error handling.
- Learnt React, server-side NodeJS and MongoDB and developed a basic web app.

Algorithms Simplified

IIT Kanpur

SEMESTER PROJECT, ASSOCIATION OF COMPUTING ACTIVITIES, CSE, IITK

April 2021 - May 2021

- Learnt about different Data Structures and advanced algorithms covering Number Theory, DP, Greedy algorithms, Trees, Graphs and practised on competitive programming platforms.
- Explored the domain of optimising time and space complexity and studied fast computation techniques.

Wikipedia Simplifier

IIT Kanpur

SEMESTER PROJECT, ASSOCIATION OF COMPUTING ACTIVITIES, CSE, IITK

April 2021 - May 2021

- Learnt about deep learning, CNNs, etc and Python library TensorFlow.
- Explored the domain of Natural Language processing, specifically text simplification.

Relevant Coursework

Data Structures and Algorithms

Discrete Mathematics

Fundamentals of Programming

Linear Algebra and ODE

Principles Of Data Base Systems

Software Development And Operations

Computer Organization

Logic in Computer Science

Probability in Computer Science

Positions of Responsibility

Senator BT/BS Y20

IIT Kanpur

STUDENTS' SENATE, IIT KANPUR

March 2021 - Present

- Represented over 1200 students of freshmen batch and helped in carrying out initiatives in the governing body of Students' Gymkhana.
- Participated and contributed to the legislation of Student run bodies voicing concerns and securing interests of Y20 Batch.

Web Executive

STUDENTS' PLACEMENT OFFICE

IIT Kanpur
June 2021 - Present

- Responsible for maintenance of the SPO website and tracker.
- Managing Django based recruitment automation portal for Internship and Placement at IITK.
- Collaborating with the placement coordinators and executives to update the website and portal with the recent developments.

Senior Executive

TECHKRITI 2022

IIT Kanpur
Aug. 2021 - Present

- Carried out major Media and Publicity deals in different domains.
- Managed and boosted the official Instagram handle of TOSC and Techkriti.
- Curated the content for all social media handles and overall festival outreach at all tiers.

Web Executive

VOX POPULI

IIT Kanpur
Oct. 2021 - Present

- Responsible for maintenance of the Vox Populi website and SEO of Vox posts.
- Managing Wordpress based website of student media body.


Academic Mentor, Fundamentals of Computing

COUNSELLING SERVICE

IIT Kanpur
Dec. 2021 - Present

- Held virtual classes and doubt clearing sessions for the students to cope with the academic system of the institute.
- Mentored over 80 Y21 Students on the course ESC101 and concepts related to programming.

Miscellaneous

- Ranked 5th in Freshers Programming Contest organized by Programming club. This was a competitive programming contest for Freshmen year.
- Seconded and organized the PenPal Initiative  for Freshmen year as Batch senator to increase interaction among students. This event saw participation of over 600 freshmen Students.
- Guided and mentored 6 freshmen students into life at IIT Kanpur, as their student guide, in such unprecedented times virtually.
- Winner of an event Game of Auctions organized by Entrepreneurship Cell, IIT Kanpur. In this even each team had to optimally make a team of executives for a startup in an auction.