# Gurbaaz Singh Nandra

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# **Academic Qualifications**

Year	Degree/Certificate	Institute	CPI/%
2019 - Present	B.Tech in Computer Science and Engineering	Indian Institute of Technology, Kanpur	9.3/10
2019	Class XII (CBSE)	MGN Public School, Jalandhar	95%
2017	Class X (CBSE)	MGN Public School, Jalandhar	10/10

## Honors & Awards

- Received Academic Excellence Award in academic year 2019-20 for exceptional performance in academics.
- Selected for **pre-seed ideation program** 2020 by **DoRA IIT Kanpur** with project titled "Papertowns: An AR product" and granted a maximum sanction of **Rs. 90000**.
- Secured All India Rank 208 in JEE Advanced 2019 among 200k shortlisted candidates, conducted by IIT Roorkee.
- Achieved All India Rank 159 in JEE Mains 2019 among 1.5 million candidates, conducted by NTA.
- National top 1% in NSEC 2018, and qualified for INAO conducted by Indian Association of Physics Teachers in 2018-19.
- Awarded KVPY fellowship 2018-19, securing All India Rank 90 conducted by IISc Bangalore.
- Recipient of NTSE Scholarship 2016-17, topped the state level screening and secured among top 1000 students in the national level.
- Qualified for **penultimate round** of **Flipkart GRiD 2.0** and proposed a **deep learning** generative model pipeline to filter the main speaker from a noise sample in real-time.

## **Projects**

AI Lawyer, Dr. Swaprava Nath, Department of CSE, IIT Kanpur

Sept'20 - Dec'20

Course Project

Report ? Github

- Implemented game theory and argumentation framework via graphical database Neo4j and textual entailment NLP to build an AI debating chat-bot on legal matters.
- Conducted a data-driven study, and successfully used BERT for argumentation mining to generate 2,26,335 arguments from unstructured 31,125 US Supreme Court Cases.

Model Zoo, Programming Club IIT Kanpur

Summer Project

May'20 - July'20

Github

- A learning project which involved the study, discussion as well as blog summarizing of various deep learning models.
- Used PyTorch to implement and achieve an accuracy near-SOTA as mentioned in research papers on models covering domains like GAN, Computer Vision, NLP and Image Captioning.

Online Test Portal, Dr. Piyush Rai, Department of CSE, IIT Kanpur

Sept'19 - Nov'19

Advanced Track Course Project

C Github

- Developed a web application enabling user to create or appear for a timed bound MCQ exam. Post submission one can view utilities like score, rank, average class marks and the correct solutions.
- Implemented user authentication using Firebase Auth and handled user queries via Firebase Realtime Database.

## Technical Skills

Programming: C/C++, Python, Javascript, Julia Frameworks: PyTorch, Keras, Tensorflow Utilities: OpenCV, Sklearn, Git, LATEX, Bash, Neo4j, Vim Web: Django, Flask, REST API, HTML5, CSS

#### Relevant Coursework

\* - Ongoing

Data Structures and Algorithms Software Development and Operations\* Computer Organisation\*

Discrete Mathematics Fundamentals of Programming Logic in Computer Science\*

Linear Algebra and ODE Introduction to Game Theory and Mechanism Design Multivariate Calculus

### Positions of Responsibility

#### Student Guide, Counselling Service IIT Kanpur

Nov' 20 - Present

• Assisted a group of 5 freshmen academically and emotionally, to get acclimatized with the new college environment.

## Academic Mentor, Electrodynamics, Counselling Service IIT Kanpur

Nov' 20 - Present

• Held virtual classes and doubt clearing sessions for the students to cope with the academic system of the institute.

## Secretary, Astronomy Club IIT Kanpur

May' 20 - Present

• Responsible for handling club activities and organising exciting techno-week events in astronomy for the freshers.

#### Secretary, Quiz Club IIT Kanpur

July' 20 - Present

• Tasked with conducting quiz events for freshers and managing the design sector for social media posters for the club events.