



Pranshu Gaur

Bachelor of Science
Mathematics and Scientific Computing
Indian Institute Of Technology, Kanpur

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Pranshu Gaur
praaan

ACADEMIC QUALIFICATIONS

Degree	Institute	CPI/Percentage	Year
Bachelor of Science	Indian Institute of Technology, Kanpur	9.2/10 (Till 3rd Sem)	2020-2024(Expected)
Senior Secondary	Delhi Public School, Bokaro (CBSE)	97.8%	2020
Secondary	Delhi Public School, Bokaro (CBSE)	97.2%	2018

AWARDS AND ACHIEVEMENTS

- Received **Academic Excellence Award** given to **Top 10%** students of IITK for exceptional academic performance [2021]
- Secured **All India Rank 537** among 1,50,838 candidates in **Joint Entrance Exam (JEE) Advanced 2020** [2020]
- Achieved a percentile of **99.85** among over 1.1 million candidates in **Joint Entrance Exam (JEE) Mains 2020** [2020]
- Secured **All India Rank 210** in **Kishore Vaigyanik Protsahan Yojana (KVPY) - SA** conducted by **Indian Institute of Science (IISc)**, Bangalore and a recipient of the corresponding fellowship [2018]
- Two-time Regional Mathematical Olympiad (RMO) Awardee**, qualified for **INMO** conducted by Homi Bhabha Centre For Science Education (HBCSE), in **2018** and **2019** [2018&2019]
- State Top 1%** in **National Standard Examination in Physics (NSEP)** and **National Standard Examination in Astronomy(NSEA)** conducted by Indian Association of Physics Teachers(IAPT) in **2019**, qualified for **INAO 2020** [2019-20]
- State Rank 6** in **National Standard Examination in Chemistry (NSEC)**, conducted by the Indian Association of Physics Teachers (IAPT) in **2019**, qualified for **INChO 2020** [2019-20]
- Awarded **A*** grade in Engineering Graphics for outstanding performance in the class [2021]

KEY PROJECTS

- Drone Bootcamp** May'21 - Jul'21
Science and Technology Council, IIT Kanpur
Github
– Analyzed various aspects of Drone Dynamics, Avionics and Kinematics for a quadcopter and hexacopter
– Introduced to **Ubuntu** and implemented Husky simulation using **Gazebo** to visualize motions of Quadcopter
– Modelled drone simulation using **Matlab and Simulink**, examined the feedback loop of PID Controller
– Evaluated and ran **ROS Packages**, created a **Catkin** workspace and executed a flight on **Mission Planner**
- Numbers Made Dumber** Mar'21 - Jul'21
Stamatics Society, IIT Kanpur
Github
– Explored various concepts in Number Theory like **Totient Functions**, **Congruences** and **Linear Diophantine Equations**
– Worked on **Fermat and Mersenne Primes** and implemented different modular algorithms for problem solving.
– Introduced to cryptography and studied public-key cryptography schemes including **RSA encryption**.
- Deep Dive Into Algorithms** Apr'21 - Jun'21
Association for Computing Activities, IIT Kanpur
– Analysed some basic and **Advanced Algorithms** used in Computer Science
– Implemented Standard Template Library in C++ and algorithms like **Divide & Conquer** and **Binary Search**
– Grasped the basics of Number Theory, Graph theory, Backtracking and Bit Manipulation
- CP Bootcamp** May'21 - Jul'21
Science and Technology Council, IIT Kanpur
– Introduced to algorithms of Graph Theory like **BFS**, **DFS** and implemented various **Modular Arithmetic Algorithms**
– Participated in various contests on **Codeforces** to implement and get familiarised with the algorithms learnt

TECHNICAL SKILLS

Languages	C, C++, Python, R, SQL, JavaScript	Libraries	STL, PyTorch, Beautiful Soup, Tensorflow, OpenCV
Softwares/Tools	Git, Github, NodeJS, Autodesk Fusion 360, ROS, Gazebo, MATLAB, L ^A T _E X, Ubuntu, Microcap		

POSITIONS OF RESPONSIBILITY

- Secretary**, Stamatics Society, IIT Kanpur Sep '21 - present
– Assisted in conducting a weekly mathematics quiz, **Problem of the Week** for IITK students
– Presently learning fundamentals of Node.js, Core modules, and Node Package Manager (NPM) under Stamatics Team
- Secretary**, Aeromodelling Club, IIT Kanpur Aug'21 - present
– Authored an article - **History of Drones** and learnt the basics of making home made drones
– Presently working under the **ANSYS** Team to learn simulation for designing, testing and operation of aircrafts
- Secretary**, Chess Club, IIT Kanpur Jun'21 - present
– Ideated, Curated and Hosted the **IITK Chess League** - a team event for more than 100 students of IITK Junta and Alumni
– Created and Hosted the **Freshers Chess Champs** for the then fresher batches Y20 and Y21

RELEVANT COURSES

Fundamentals of Computing*	A First Course in Linear Algebra*	Set Theory and Logic
Probability & Statistics ⁺	Abstract Algebra ⁺	Modern Cryptology ⁺
Data Structure and Algorithms [†]	Real Analysis ⁺	Engineering Graphics**

*: Excellent Performance | **: Outstanding Performance

+ : Ongoing | † : Online