

# Sarthak Rout

Second Year Undergraduate, Indian Institute of Technology Kanpur  
Department of Computer Science and Engineering

sarthakr@iitk.ac.in  
+91-9664087578

## ACADEMIC ACHIEVEMENTS

Year	Degree	Institute	CPI/%
2019-Present	B.Tech Computer Science and Engineering	Indian Institute of Technology, Kanpur	9.50/10
2019	CBSE(Class XII)	Sir Padampat Singhania Public School, Kota	95.2/100
2017	CBSE(Class X)	DAV Public School, Chandrasekharpur, BBSR	10/10

## SCHOLASTIC ACHIEVEMENTS

- Recipient of **Academic Excellence Award** from IIT Kanpur 2019
- Secured **All India Rank 202** in JEE (Advanced) among over 0.2 million students 2019
- Secured **All India Rank 207** in JEE (Main) among over 1.3 million students 2019
- Qualified for **OCSC of IJSO and IAO 2016, IOAA 2017, IOAA 2018, IChO and IOAA 2019** organised by HBCSE.
- Recipient of **Kishore Vaigyanik Prosthana Yojana (SA)** fellowship award with AIR 42, IISc Bengaluru 2018
- Recipient of **National Talent Search** Scholarship , NCERT 2017

## PROJECTS

- **Private Computation using Cryptographic Primitives** (May '20 - Jul '20)  
*By SnT Club | Mentor: Aditya Gulati | IITK*
  - Learnt about **Private Computation, FSS, FHE, Yao's Garbled Circuits** etc.
  - Learnt about **GRPC, Compiler Theory and Rust**.
- **InfoSec IITK** (Feb '20 - Apr '20)  
*By Association of Computing Activities | IITK*
  - Found critical vulnerabilities in OARS, IITK
  - Learnt about **SQL Injection, XSS and XXE injection** along with how to prevent them.
- **Gradeless - Course Project ESC101** (Aug '19 - Nov '19)  
*Under Dr. Piyush Rai | CSE | IIT Kanpur*
  - Developed a **Web-App** to check marks of answer sheets having T/F and MCQ questions.
  - We used **Angular 8** as Frontend and **Express** as Backend with **Python | OpenCV** as scripting language for the Image Processing and Machine Learning part.

## TECHNICAL SKILLS

- **Programming Language:** C, C++, Python, TypeScript
- **Libraries :** Pandas, SciKit-Learn, OpenCV, Selenium
- **Tools :** GitHub, VS Code ,  $\LaTeX$

## RELEVANT COURSES

Fundamentals of Computing	Real Analysis and Calculus	Linear Algebra and ODE
Data Structures and Algorithms	Number Theory	Computational Methods in Engineering
Introduction to Electronics		

\* : *Ongoing course*

## POSITION OF RESPONSIBILITY AND EXTRACURRICULARS

- Secretary, Programming Club
- Secretary (Startup Internship Program), Entrepreneurship Cell
- Interned at Edvizo as Mentor in Maths teaching JEE Aspirants.
- Secured 16th position of Merit in HCL HackIITK Hackathon for detection of malware using Machine Learning
- Competitive Programming: **Codechef**

*Hyperlinks are present at appropriate places.*

*Last Updated: January 8, 2021*