Sarthak Rout

in /routsarthak | ♥ /SarthakRout | ■ sarthak2024@gmail.com | **f**

Second Year Undergraduate Department of CSE, IITK sarthakr@iitk.ac.in +91-9664087578

EDUCATIONAL BACKGROUND			
Year	Degree/Exam	Institute	CPI/%
2019 - Present	B.Tech (Computer Science and Engineering)	Indian Institute of Technology, Kanpur	9.5/10
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.

• Selected for Kishore Vaigyanik Prostahan Yojana (SA) fellowship with AIR 42, IISc Bengaluru

2018

• Recipient of National Talent Search Scholarship, NCERT

2017

PROJECTS

• **TestApp - Live** Self Project (Autumn 2020)

- Developed an assessment application using Angular integrated with Firebase.
- o Used RxJs library and concepts of routing, services, observables and modularity.
- Used it to conduct online MCQ exam for about 20 students.
- Private Computation using Cryptographic Primitives

(May '20 - Jul '20)

By SnT Club | Mentor: Aditya Gulati | IITK

- Learnt about Private Computation, GRPC, Compiler Theory and Rust.
- \circ Learnt about Function Secret Sharing, Fully Homomorphic Encryption and $\,$ Yao's Garbled Circuits.

• InfoSec IITK

(Feb '20 - Apr '20)

- By ACA | Mentors: Priydarshi Singh, Varun Goyal | IITK
 - o Found critical vulnerabilities in OARS, IITK
- gradeLess Course Project ESC101

(Aug '19 - Nov '19)

Under Dr. Piyush Rai, CSE

o Developed a webapp to check marks of answer sheets having True/False and MCQ questions.

• Learnt about **SQL Injection**, **XXS and XXE injection** along with how to prevent them.

 We used **Angular 8** as Frontend and **Express** as Backend with **Python** as scripting language for the Image Processing and Machine Learning part.

TECHNICAL SKILLS

• **Programming Language/Framework:** C, C++, Python, TypeScript, Octave, Angular, Express

• Libraries: Pandas, SciKit-Learn, OpenCV, Selenium

• Tools: Git, MEX

RELEVANT COURSES

Fundamentals of Computing*
Data Structures and Algorithms
Introduction to Electronics

Real Analysis and Calculus* Numerical Analysis* Linear Algebra and ODE Number Theory

 $(* \equiv A* for exceptional performance)$

Position Of Responsibility and Extracurriculars

- Secretary, Programming Club
- Secretary, Entrepreneurship Cell (Startup Internship Program)
- Interned at Edvizo as Mentor in Maths teaching JEE Asiprants.
- Secured 16th position of Merit in HCL HackIITK Hackathon for detection of malware using Machine Learning. **Link**
- Competitive Programming: Codechef (5*)

Hyperlinks are present at appropriate places in bold. Last Updated: January 11, 2021