Sarthak Rout

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Second Year Undergraduate
Department of CSE, IITK

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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** (Autumn 2020)
  Self Project
  - Developed an assessment application using **Angular** integrated with **Firebase**.
  - 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**.
  - 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
  - Learnt about **SQL Injection, XXS and XXE injection** along with how to prevent them.
  - Learnt about **privilege escalation** using **Burp Suite, Metasploit, Nmap** etc.
  - Found critical vulnerabilities in OARS, IITK

- **gradeLess - Course Project ESC101** (Aug '19 - Nov '19)
  Under Dr. Piyush Rai, CSE
  - Developed a **webapp** to check marks of answer sheets having True/False and MCQ questions.
  - 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, LaTeX, Metasploit

RELEVANT COURSES

Fundamentals of Computing*	Real Analysis and Calculus*	Linear Algebra and ODE
Data Structures and Algorithms	Numerical Analysis*	Number Theory
Introduction to Electronics		*(* ≡ 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