

Second Year Undergraduate · Computer Science and Engineering Indian Institute of Technology

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#### Education

Year	Degree	$\operatorname{Institution}(\operatorname{Board})$	CGPA/%
July'16 – Present	B.Tech, CSE	Indian Institute of Technology, Kanpur	8.2/10.0
2016	AISSCE – XII	Saint Josephs School, Kota (CBSE)	95%
2014	AISSCE – X	Saint Pauls School, Kota (CBSE)	94%

#### Honors & Awards

2016	All India Rank 187, Joint Entrance Exam Advanced, 200,000 candidates	India
2016	All India Rank 571, Joint Entrance Exam Mains, 1.5 million candidates	India
2016	All India Rank 52, KVPY Scholarship, Indian Institute of Science and Government of India	Bangalore, India
2015	Merit Certificate, National Top 1%, Indian National Chemistry Olympiad	India
2015	Merit Certificate, State Top 1%, Indian National Astronomy Olympiad	India

## Work Experience \_\_\_\_\_

#### **New York Office, IIT Kanpur**

Kanpur, India

Infrastructure Management, under Prof. Manindra Agarwal

May 2017 - Present

- Interned in Summer'17, currently associated as volunteer.
- Worked on a scalable microservice based web application.
- Deployed microservices utilizing Docker container, Coreos Container Linux, JenkinsCI, and have maintained the cluster on Kubernetes.
- Configured and deployed Persistent Volume Storage System.
- Technologies used: Kubernetes, Docker, Nginx, Coreos Applications, Glusterfs.

#### Projects \_

#### **Linux Memory Management**

IIT Kanpur

under Prof. Debadutta Mishra

Oct. 2017 - Present

- Create a better Virtual Address organization for improving performance.
- Find wastage (internal fragmentation) in page-table pages.
- · Study compressibility of page tables for different applications.

 Ethical Hacking
 IIT Kanpur

 PROGRAMMING CLUB
 Summer'2017

- Learnt exploitation techniques like buffer-overflow, integer-overflow, format strings and heap exploits.
- Used debuggers and knowledge of x86 Assembly language to exploit binary files.
- Performed various web attacks like sql-injection, XSS and CSRF.
- Learnt basics of Cryptography.

**Linux From Scratch** 

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ASSOCIATION OF COMPUTING ACTIVITIES

Feb. 2017 - Apr. 2017

- Created an offline **Student Search** entirely in bash script and mini-projects in python like implementing **Grep via Python** and using **ZeroMQ** to make a game of passing the parcel.
- Created a **Customized Linux** based operating system from scratch to get familiar with Linux Environment.
- Mid Semester project under Association of Computing Activities (ACA), IIT Kanpur.

# Extracurricular Activity \_\_\_\_\_

Secretary Programming Club, IIT Kanpur Leader Developer Student Club, IIT Kanpur Apr. 2017 - Present

July 2017 - Present

# Relevant Coursework \_\_\_\_\_

Introduction to Programming Discrete Mathematics (i) Logic in Computer Science (i)

*i*: In progress

Skills\_

**Languages** C/C++, Bash, Python, Golang, Javascript

**Utilities** Linux shell utilities, Git, Docker, Kubernetes, , GDB, ŁTFX, Vim

**Operating Systems** Arch Linux, Ubuntu

### Miscellaneous \_\_\_\_\_

- Enthusiastic about Systems and learning new stuff about Linux architecture, networking and security.
- Contribute to open source projects and maintain projects on Github.