# Saurabh **Kumar**

INFORMATION SECURITY AND OPEN SOURCE DEVELOPMENT ENTHUSIAST

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## Summery

Final year student at Indian Institute of Technology Roorkee. Software and Security enthusiast. An open-source contributor, a Google Summer of Code 2019 student, and CTF Player. Experienced in Python, C++ and JavaScript. Interested in devising a better problem-solving method for challenging tasks, and learning new technologies and tools if the need arises.

## Experience

### Security Researcher Intern
*Remote*

PAYATU TECHNOLOGIES
*May 2020 - Oct 2020*

- As part of cloudfuzz team, worked on fuzzing software Adobe/Foxit.
- Implemented python script which automate the generation of Dharma grammar for Acrobat JavaScript API and successfully integrated it on Cloudfuzz Virtual machines for fuzzing.
- Analyzed some crashes.
- Tech Stack: Python, Dharma, Git, Acrobat JavaScript API's, IDA, Windbg

### Google Summer of Code 2019 | Software Engineering Intern
*Remote*

OWASP FOUNDATION ( LINK )
*6th May 2019 - 19th August 2019*

- Contributed to DefectDojo an open-source vulnerability management tool. Mentored by Aaron Weaver .
- Successfully implemented custom tools for Defectdojo project like Cobalt, Openscap, Mozilla observatory, etc.
- Wrote Unit and integration for scans like Nmap, Nikto, Checkmarx, etc.
- found some security bugs in DefectDojo and successfully fixed it. Achieved all my Goals in given amount of time.
- Tech Stack: Git, Python, Docker, Django, Jira, CI/CD

### Cyber-Security Intern
*Delhi, India*

DEFENSE INTELLIGENCE AGENCY (ADGSI/DIA)
*13 May 2019 - 26 June 2019*

- As part of red team, worked on Dynamic and static analysis of Windows Malware and Process Injection techniques
- Successfully analyzed given malware and wrote report about how it works and also implemented some automated tools.
- Tech stack & Utility: C#, Windows API, Assembly, Python, Golang, Visual Studio, IDA, Windbg, Wireshark, Metasploit

## Positions of Responsibility / Extracurricular Activity

### SDS InfoSec
*IIT Roorkee*

COORDINATOR | MEMBER
*February 2018 - Present*

- On-campus group of information security enthusiasts
- Organized meetings/talks related to CTFs and Information Security
- Participated in various CTFs as dr3dd with team InfoSecIITR.
- Designed challenges for Backdoor ctf's.

### DefectDojo Contributor & Moderator
*Remote*

OWASP FOUNDATION ( LINK )
*November 2019 - May 2020*

- After successfully completion of GSoC'19, I became member of moderator team of the DefectDojo.
- Contributed to project and reviewed PR's.

### Bug Bounty
*Remote*

PARTICIPANT
*January 2020 - Present*

- In my free time i like to participate in bug bounty programs. ( Link )

## Skills

| | |
|---|---|
| **Computer Languages** | Python3, C,C++, JavaScript, Bash, Assembly, C#, Golang. |
| **Utilities** | Git, IDA, BurpSuite, Nmap, Wireshark, GDB, Radare2, Docker, Kubernetes, Chrome Developer Tools |
| **Languages Known** | English(SRW), Hindi(SRW) |
| **Knowledge Of** | OWASP Top 10 |
| **Extra Courses** | AWS Fundamentals: Going Cloud-Native, Google Cloud Platform Fundamentals: Core Infrastructure, Software Security, Splunk fundamentals part 1, Cryptography 1 |

# Education

**Indian Institute of Technology Roorkee**                        *Roorkee, India*
B.TECH IN METALLURGICAL AND MATERIALS ENGINEERING                 *2017-2021*
- Senior Year
- Expected June 2021

# Program Committees

| 2019 | **Problem Writer**, 2019 n00bCTF Hacking Competition of IIT Roorkee | *IIT Roorkee* |
| 2019 | **Problem Writer**, 2019 backdoorCTF Hacking Competition of IIT Roorkee | *IIT Roorkee* |

# Awards / Scholarships / Academic Achievements

| 2019 | **2nd Place in finals (India)**, CSAW CTF 2019 | *IIT Kanpur* |
| 2019 | **Qualified for finals**, CyBRICS CTF 2019 | *Vadodara* |
| 2019 | **Qualified for finals**, Brainwaves CyberSecurity 2019 CTF | *Bengaluru* |
| 2018 | **1st place**, Codefest-CTF 2018 orgainsed by IIT BHU | *India* |
| 2018 | **Fellowship**, Yes Foundation India Fellowship | *India* |
| 2013 | **Sports**, Selected for Under-17 National Hockey Jnv Lucknow region team. | *India* |