Saurabh **Kumar**

INFORMATION SECURITY AND OPEN SOURCE DEVELOPMENT ENTHUSIAST

(+91) 9532788384 | ✉ skumar1@mt.iitr.ac.in | ⌂ dr3dd.live | dr3dd589 | dr3dd

Summary

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

2021   **CVE-2021-21010 by Adobe**, for Uncontrolled search path element vulnerability in Adobe InCopy.   *International*
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*