

DIPESH KHADELWAL

3rd year Undergraduate, Computer Science and Engineering

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EDUCATION

- **B.Tech, Computer Science and Engineering** | Indian Institute of Technology, Kanpur | 2018-2022 (expected) | CPI : **9.4/10**
- **Class XII** | Jayshree Periwal High School | 2018 | **94.6%**
- **Class X** | Maheshwari Public School | 2016 | **CGPA : 10/10**

SCHOLASTIC ACHIEVEMENTS

- 2018 | **AIR 211, (JEE-Advanced)** among 200,000 candidates; **AIR 334, (JEE-Main)** among 1.5 million candidates
- 2016 | **AIR 137, KVPY Fellow**
- 2016 | **NTSE Scholar**
- 2015 | Cleared Junior round of **National Mathematics Talent Contest (NMTTC)** was among **top 10%** scorers of the institute
- 2011 | Qualified the City Round and participated in **Zonal Round of iKen-scientifica** (AIR = All India Rank)

CONFERENCE ATTENDED

- 2020 | **Nullcon**, part of SCADA CTF organizing team

RELEVANT COURSEWORK

- Introduction to Programming
- Data Structures and Algorithms
- Software Development and Operations
- Discrete Mathematics
- Computer Organisation & Instruction Set Architecture
- Formal Logic
- Introduction to Electronics
- Linear Algebra and Differential Equations
- Blockchain Basics (Coursera)

EXTRA-CURRICULARS

- 2013-14 | **Sports** | Gold Medalist in Volleyball
- 2015-16 | **Soft Skills** | Secured 2nd position in Inter School Debate Competition in Sanskriti conducted by Janki Devi School
- 2013-14 | **Artistic Skills** | Secured 3rd position in Inter School Competition of Pictorial Depiction of poem
- 2012-13 | **Theatre** | Participated in Inter School Short Play Competition conducted by Sanskar School

COMPETENCIES

- Languages** Python (Scapy, Dnspython, Requests, Dnsgen, Open-CV, concurrent.futures, pytest), C, C++, Bash
- Web** MySQL, Sqlite3, Django, RabbitMQ, pytest (Python), PostgreSQL, HTML
- Softwares** AutoCAD, Autodesk Inventor, Xilinx ISE, OpenVAS, Wire Shark
- Misc.** Git/GitHub, Docker, Mbtget, Massdns, Ubuntu, Kali Linux, Nmap (vulnerability scan), LaTeX, crontab

EXPERIENCE

CYBERSECURITY ANALYST | CLOUDSEK, BANGALORE

APRIL'20 - AUGUST'20

1. PROJECT : SUBDOMAIN TAKEOVER CHECKER TOOL | POSITION : AUTHOR

Developed a highly scalable tool which checks if a subdomain is vulnerable for takeover, Created a database of more than 70 signatures of different services, Studied various hosting platforms like Azure, etc. during this process, Testing the tool on FDNS dataset (covers almost all internet)

Subdomain Takeover DNS Azure Docker MySQL Sqlite3 FDNS Dataset Rabbitmq jsonlines dnspython requests concurrent.futures

2. PROJECT : ANALYSIS OF POPULAR SERVICES | POSITION : AUTHOR

Analysed the FDNS dataset to find popular hosting services

MySQL FDNS Dataset jsonlines requests concurrent.futures

3. PROJECT : SUBDOMAIN ENUMERATION TOOL | POSITION : DEVELOPER

Studied the whole tool in detail which includes understanding dnsgen (python), massdns, etc. and wrote test fixtures using pytest for testing web scrappers, Responsible for making this tool highly scalable for running it on a large scale

Massdns Subdomains Finder Bruteforcer Web Scrapping Python pytest dnsgen dnspython requests

STUDENT RESEARCH ASSOCIATE | C3I CENTER, IIT KANPUR

DECEMBER'19 - MAY'20

Created environments for automation of DOS and DDOS attack, Implemented CVEs and scanned the network for vulnerabilities

Cybersecurity Nmap Open-VAS Docker DOS DDOS Mbtget Wireshark Python Scapy Bash SNMP Hard-Coded credentials in Firmware

PROJECTS

LIFE@IITK - PROGRAMMING CLUB, IIT KANPUR

MAY-JUL'19

Unified web-app for all activities, updates and personal schedule (including individual academic and non-academic student-body updates) at IIT Kanpur, Team won best project in socially relevant category

Django Software Development

EASY SALE - SUMMER OF CODE, IIT KANPUR

MAY-JULY'19

Worked in a team of five and developed web app which will help small scale industries to go online by creating a work space for them where they can manage their businesses and set orders and payment online

NodeJS PassportJS PostgreSQL

ABU ROBOCON 2019 [MENTOR-PROF. ASHISH DUTTA]

SEP'18-APR'19

Handled the vision of robot using Open-CV (python), Contributed in manufacturing and testing of a semi autonomous four legged robot, Qualified for the second round of the competition

Robotics Open-CV Computer Vision Python Automation

POSITIONS OF RESPONSIBILITY

STUDENT GUIDE @ COUNSELLING SERVICE, IIT KANPUR

APR'19-APR'20

Mentored 5 first year undergraduates for a smooth transition to college

SECRETARY @ PROGRAMMING CLUB, IIT KANPUR

JAN'19 - FEB'20

Conducted **Competitive Programming Basics Workshop** in collaboration with **Codechef**

SECRETARY @ FINE ARTS CLUB, IIT KANPUR

JAN'19 - FEB'20

Conducted Exhibitions and Workshops; my paintings were displayed in **Antaragni-2019's exhibition** (IIT K's Cultural Fest)