VIPUL UJAWANE

B/703, Kiran Towers, Link Road Opp. Toyota Show Room, Malad (West) Mumbai, Maharashtra India - 400064 ## 9th October 1997

ACADEMIC DETAILS

Education	Institute / Board	Year	CGPA / %
B. Tech and M. Tech (Dual Degree): Quality Engineering Design (Industrial Electronics)	IIT Kharagpur	2016 - 2021 (Expected)	8.49 / 10
Class - XII	RBSE	2015	79 %
Class - X	ICSE	2013	87 %

PROJECTS

Gru

IDOR, Ajax, CSRF, Captcha, Web Security

June'18

- Developed a Series of Proof of Concept Exploits to access data from ERP, IIT Kharagpur
- Reported IDOR, Cross Site Request Forgery, and Improper AJAX Vulnerabilites with possible Mitigation Techniques
- All Vulnerabilities responsibly disclosed to ERP Section, IIT Kharagpur

Network Sniffer

Embedded Systems, Computer Networks, Python, C++, Arduino, ESP8266

Jan'19-Present

- Capstone Project for Embedded Systems Lab, under Prof. Alok Kanti Deb and Prof. Debdoot Sheet, IIT Kharagpur
- A Layer 2 (Data Link Layer) Packet Capturing Device, which Sniffs packet from Wifi Routers.
- Captured Packets are Stored in a SD Card and Also Available via Serial Communication through Wireshark

Campus Security System

Software Engineering, UML, JAVA, SQL

Jan'18-April'18

- Term Project for Software Engineering under Prof. Sudip Misra, IIT Kharagpur
- Followed the Waterfall Life-cycle Model for the development of the project.
- Created a Specifications Requirement Sheet, Data Flow Diagram and UML Diagram for the Project.
- Back-end Developed in JAVA and MySQL for Database. Used the JUnit framework for Unit Testing the project.

PING: Professor Information Gatherer

Web scraping, information retrieval, python, requests, beautifulsoup

Jan'19-Feb'19

- A Information Retrieval System designed to gather Professor's data working in the area of Interest
- Presents a Ranked List based on Jaccard similarity to input queries with results saved in a xls format.

Acad-Search

Python, Django, HTML, CSS, Javascript, JQuery

May'17-June'17

- A Central Repository build for the students of IIT Kharagpur to hold Notes, Question Papers, Slides, etc.
- Back-end Developed in Django (Python), while Front End Developed using HTML, CSS, JavaScript and JQuery
- Mentored students on the Project during Kharagpur Winter of Code (KWOC)
- Developed a web Crawler to search for past year papers from the IIT Kharagpur Library website

Quiz Server

Socket Programming, Python, Network Application

May'17-June'17

- A real-time multiplayer Quiz game for recreational purposes.
- Created a Client and a server for the game. Message transfer done using UDP (User Datagram Protocol) via sockets for Python.

All Source Codes Available on github.

TECHNICAL SKILLS

- Areas: Software Engineering, Web Development, Software and Systems Security, Information Retrieval
- Languages: Python, C, C++, Java, Javascript, MySQL, LATEX, x86 Assembly, AVR Assembly, MATLAB, Shell Script
- Tools: GDB, Metasploit, Wireshark, Nmap, Burp Suite, SQLMap, Ghidra, Arduino

ACHIEVEMENTS

• Team x0rc3r3rs: CTF Team of IIT Kharagpur: Global Rank 718 on CTFTime

• BSides San Francisco CTF: Ranked 90/1138

• Securinets CTF: Ranked 107/436

• Facebook/Google BountyCon CTF: Ranked 138/404

MITRE STEM CTF: Ranked 205/587Pragyan CTF: Ranked 239/449

RELEVANT COURSES

Programming & Datastructures* Software Engineering* Computer Organization and Architecture
Information Retrieval Computer Networks* Computational Intelligence in CyberSecurity
Embedded Systems* Digital Electronics* Controls System Engineering*

CERTIFICATIONS

• Software Security: Coursera

• Web App Penetration Testing : Cybrary

• **Metasploit** : Cybrary

POSITIONS OF RESPONSIBILITY

• **Student Mentor**July'18-Present
Mentored 1st-year students under the Student Mentor Programme conducted by Student Welfare Group.

• Electronics Head: TeamKART

October'16-Present

- TeamKART is the Official FSAE Team of IIT Kharagpur
- Led a Group of 5 Members and was responsible for all decisions related to Electronics
- o Built a Wiring Harness, a Driver Dashboard Display and A Electronic Gear Shifting System for the latest car K4

EXTRA CURRICULAR ACTIVITY

- Created the first VFX Movie of IIT Kharagpur as a part of Technology Film and Photography Society, IIT Kharagpur
- Part of the Silver Winning Ad-Design Team of General Championship, IIT Kharagpur

^{*} marked courses have a laboratory component.