

Rudranil Maity

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PROFESSIONAL SUMMARY

Recent cyber security graduate adept in cryptography, penetration testing, and secure coding per academic projects. Seeking entry level security role at Coinbase to apply automation, app security, and cryptography skills and contribute to mission. Eager to learn and strengthen defenses enabling safe ecosystem scaling.

EDUCATION

New Jersey Institute of Technology

Master of Science in Cyber Security & Privacy, Cumulative GPA: 3.42/4.00

Newark, NJ

Sep. 2022 – Present

Netaji Subhash Engineering College

Bachelor of Technology in Computer Science, CGPA: 8.44/10

Kolkata, India

Aug. 2018 – July 2022

PATENT & PROJECTS

Patent: Light Fidelity (LIFI) Based Data Transfer Device For Mobile Phone

Published – May 2023

- Developed the first-ever android application for Light Fidelity-based encrypted data transfer over void medium.
- Achieved over 100 times increment in speed of secured transfer with Li-Fi over the conventional methods.
- Leveraged **reactNative**, using intensity-controlled flashlight as a source and infrared sensor as a receptor.
- Design no: 363174-001; CBR: 200974 and class 14-02. Published in the Journal of Intellectual Properties India.

Buffer Overflow | x86 assembly, Cryptanalysis, Privilege Escalation, Incident Response, Linux | Jan. 2023 – May 2023

- Mitigated multiple vulnerabilities in **x86 assembly** programs throughout the project with GDB in Ubuntu.
- Successfully performed **Buffer Overflow** attacks on both stack based and heap based programs.
- Utilized **GDB** in multiple **Linux distributions** to inspect disassembly of codes in runtime.
- Analyzed with Social Engineering Toolkit; finding ways to get secured from those vulnerabilities with **ASLR, DEP** and Stack Smashing protection on Linux Distributions; as well as implementing **SIEM** and **IDS**.

Detection of Weak Passwords | Java, Code Hardening, Hashing, PKI and HIPAA Concepts | Oct 2022 - Nov 2022

- **Course Project:** Developed a program in **Java** which detects weak salted passwords over a dictionary attack.
- Performed a successful **brute force** attack on a database with the "rockyou.txt" file; containing over 5 million texts; later carried the attack to more intensity with "weakpass" databases; containing over 40 million passwords.

Team Leader: **TALENT ARCHIVES** (A freelancing website for artists)

Jan 2022 - April 2022

- Led a team of four individuals in developing a full-stack (**ReactJS, NodeJS and MongoDB**), e-commerce platform tailored towards artists as part of a final-year group project at Netaji Subhash Engineering College.
- Undertook **SDLC and CI/CD Pipelines** concept for timely completion and spearheaded presentation by leveraging the project's functionalities through ER Diagrams and DFDs.

EXPERIENCE

Teaching Assistant – Data Mining

May 2023 – Present

New Jersey Institute of Technology

Newark, NJ

- Managing the graduate course for CS634; through grading of assignments and projects included in the syllabus.
- Giving feedback and managing timely submissions through announcements and focusing on improving students' performance regarding course projects which implements Python Apriori Algorithm to Relational Databases.

Tutor (Computer Science, Matlab and Physics)

June 2023 – August 2023

New Jersey Institute of Technology

Newark, NJ

- Tutoring incoming college students through solving their queries on problems related on over 5 subjects.
- Assisting students in solving complex problems from Sears and Zemansky's University Physics.
- Mentoring 30+ students in learning Python and Matlab basics while helping in programming assignments.

TECHNICAL SKILLS

Programming: Java, Python, C, JavaScript (ReactJS, NodeJS, AngularJS, ExpressJS), x86 assembly, HTML/CSS

Cybersecurity: Cryptographic Algorithms, Cryptanalysis, PKI Concepts, Privilege Escalation, Penetration Testing, Incident Response, DevSecOps, Web App Security, SIEM, IDS, Firewalls.

Networking: IP Configuration, DNS, OSI Layers, TLS/SSL, LDAP, VPN, IPSec, VLAN, LAN topologies, MPLS.

Project Management: Git and Github, JIRA, SCRUM Methodologies, Trouble Ticketing Systems/CRM.

Operating Systems: Linux Distributions (Kali, Ubuntu, ParrotOS, Archlinux), Windows.

Tools: Wireshark, GDB, John the Ripper, Burpsuite, Ettercap, NMap, Snort, Aircrack-ng, Metasploit, Nessus, Yersinia, Social Engineering Toolkit.