

Aryan Chandrakar

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Master's in Information Technology Information Security – **3.91/4 CGPA**

Aug 2022-Dec 2023

Introduction to Information Security • Information Assurances • Cyber Law & Ethics • Telecommunication and Computer Networks

Upcoming courses- Adversarial Machine Learning, Browser Security, Network Security & Cyber Risk Modeling

Vellore Institute of Technology

Vellore, TN

Bachelors in CSE with spec. in Information Security - **9.13/10.0 CGPA**

July 2018-May 2022

Cryptography • Blockchain & Cryptocurrency Technology • Web Security • Cyber Security • Data Privacy

SKILLS

Python • Java • JavaScript • SQL • Windows • Linux • Kibana • Wireshark • Suricata & Snort • Cryptography
• Networks • Web-Development • Tableau • Microsoft Office 365

EXPERIENCE

Data Privacy Software Development Intern

July 2021-August 2021

Imphy Uguine Precision

- Evaluated employee's data privacy on a social network on a web application constructed to target the data cluster, links, and sparsity issues to save from homogeneity attack
- Diagnosed the non-anonymized data to assess the chance of identifying a particular personal.
- Came up with a recommender system which uses L-diversity & T-closeness anonymization to provide better online privacy to users.

Application Development Intern

May 2020-July 2020

Jindal Stainless Ltd.

- Reduced halt time spent in several phases by establishing a data managing application
- Optimized the resource spent on managing the products and equipment, with need of only a single authority to handle it all.

MAJOR PROJECTS & RESEARCH WORK

- **Securing Private Infrastructure with Smallstep step-ca server** 2022
 - With a team, developed an automated certificate token issuer for password-less logins
 - solved the access management issues by leveraging their existing OIDC compliant IAM systems
 - Automated revocation, authentication & authorization solving issues in access management
- **Approach to Deal with Prevailing Threats & Issues of False Privacy & Security** 2022
 - Decreased network latency from 725ms to 65.68ms, with introduction of improved version of Onion routing protocol
 - Developed system and browser assessor to keep secure with only effect of 0.4% in retransmission and 1.6ms for latency with almost nil effect on CPU load
- **Image Protected Hypertext Transfer Protocol** 2021
 - Introduced communication protocol to hide packet besides encrypting as in HTTPS, providing a security of 2.6×10^{21} yrs. against brute force attack
 - Reduced chance of MITM attack during communications
- **Parallel Web Crawler and Vulnerability Assessment** 2021
 - A crawler that runs 6% more efficiently with user centric alerts and secure development
 - Fetching the links and hyperlinks from any website, the crawler also performs a vulnerability scan on them including the XSS, SQLi, SSL stripping etc.

EXTRA-CURRICULAR ACTIVITIES

- Gold Level NASSCOM Certified Security Analyst
- Math – a – thon Rank-2 Honour
- Ex- PR Head Visual Blogger's Club