

Aryan Chandrakar

Mail: aryancha@andrew.cmu.edu | **Phone:** +1-412-909-6772 |

LinkedIn: <https://www.linkedin.com/in/aryanch/>

GitHub: <https://github.com/aryanchandrakar> **Website:** <https://aryanchandrakar.github.io/>

EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Masters 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 • Adversarial Machine Learning • Browser Security • Ethical Pentesting • Cyber Risk Modeling

Vellore Institute of Technology

Vellore, TN

Bachelors in Computer Science (minor Info. 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 • Wireshark • Cryptography • TLS-SSL • TCP/IP • Browser Extensions • Security Frameworks • Networks & Telecommunication • Web-Development • Research • Microsoft Office

EXPERIENCE

Data Privacy Intern

July 2021-August 2021

Imphy Ugin 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, using python & web-development tools

Application Development Intern

May 2020-July 2020

Jindal Stainless Ltd.

- Reduced halt time spent in several phases by establishing a data managing application using Java
- 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

- **Privacy Preserving Plugin** Ongoing
 - Cover user generated queries to give minimal private information not allowing website to render tracked personalized content.
 - Query social networking services using public information to generate anonymous requests.
- **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 with automated revocation, authentication & authorization.
- **Approach to Deal with Issues of False Privacy & Security** 2022
 - **Trunk Routing Protocol:** Decreased network latency from 725ms to 65.68ms, with introduction of improved version of Onion routing protocol developed in python.
 - **System-Network Accessor:** Developed system and browser assessor using python, web-dev tools 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.
 - Developed using python, 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.
 - Developed in python, fetches the links and hyperlinks from any website, the crawler also performs a vulnerability scan on them including the XSS, SQLi, SSL stripping etc.

CERTIFICATIONS & EXTRA-CURRICULAR ACTIVITIES

- Microsoft Certified: Security, Compliance & Identity Management Ongoing
- Gold Level NASSCOM Certified Security Analyst 2021
- UMD: Software Security Specialization 2021
- Math – a – thon Rank-2 Honour 2020
- Reader & Athlete