ARKA GHOSH

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EDUCATION

Digital University Kerala (Formerly IIITM-K)　　　　2022 - 2024
M.Sc. Computer Science with specialization in Cybersecurity　　　　-

Asutosh College, University of Calcutta　　　　2019 - 2022
B.Sc. Computer Science　　　　*8.713 CGPA*

Kalyani Public School　　　　2017 - 2019
Higher Secondary Education CBSE　　　　*91%*

St. Claret School　　　　2007 - 2017
Secondary Education ICSE　　　　*91%*

EXPERIENCES

Internships:

- **R&D Intern -Centre for Digital Transformation and Innovation(October 2023-February 2024)**, Working on research problems based on Computer Vision to develop a new solution.
- **Research Intern -George Mason University(July 2023-August 2023)**, Novel research on topic related to Network Defence under the guidance of Dr. Massimiliano Albanese
- **Penetration Tester Trainee -Techgyaan Technologies(December 2021)**, Performed thorough penetration testing and documentation on Mr.Robots Vulnerable machine as my winter training project.
- **Technical Content Writer for DataFlair(July 2021-September 2021)**, where I researched different topics on java and wrote articles on them.

Technical Project:

- Created an OWASP Juice Shop and found 50+ vulnerabilities using Kali Linux, Burp suite, etc.
- Created a user-friendly web application using Flask that uses an ensemble learning method and helps detect if a given email/message is spam or ham.(https://ensemblespamdetector.onrender.com/)
- Created a website using wordpress, elementor.(https://arkag30.github.io/MyProjects/)

Technical Writings:

- I write articles related to cybersecurity online. https://arkag30.medium.com/
- https://www.researchgate.net/profile/Arka-Ghosh-13

Managerial Roles:

- **Hack-X Cybersecurity Society Founding Member.** Roles include organizing CTF, Seminars, and various other activities.
- **Placement Cell DUK core team Member.** Roles include management of various placement activities.

PUBLICATIONS AND CONFERENCES

Ensemble Learning And its Application in Spam Detection　　　　ICCECE
International Conference on Computer, Electrical & Communication Engineering　　　　*2023*

- Ensemble learning is employed to enhance email classification by considering distinct features of spam mails. Four diverse models, SVM, MNB, RF, and DT, are used for max voting. After evaluating various combinations, the optimal result is achieved by combining SVM, MNB, and DT.

https://ieeexplore.ieee.org/document/10085378

ONGOING PROJECTS

Research Projects
· Building a Language Parser for a Composite Specific Language
· A novel technique to detect attacks with the help of attack models
· Development of a smart security solution using Software Defined Networks (SDN).

SKILLS

Technical Skills
· C, C++, Python, Java, HTML, CSS, Flask, Php, JavaScript, WordPress, GIT, Kali Linux, MySQL, Vulnerability Assessment and Penetration Testing, Ethical Hacking, Machine Learning, GNS3(Network Simulation)

Other Skills and Hobbies
· Guitar, Ukulele, Harmonica, Painting, Abacus(Level 8)

ACHIEVEMENTS AND CERTIFICATIONS

Smart India Hackathon Internals   2023
· First Runner-up in SIH 2023 internals organized in DUK.

CTF 1.0   2022
· First Runner-up Organised by KSAAC `https://ksaac.duk.ac.in/event_past.php`

Entrepreneurship Cell IIT Kharagpur Penetration Testing Winter Camp   2021
· Winter Camp training program on Penetration Testing in association with E-Cell IIT KGP

Cybersecurity and Ethical Hacking Course   2021
· Cyber Security and Ethical Hacking for Beginners and Advanced from GUVI Geek.

Guinness Book Of World Record   2021
· Participated in the World Record Winning event AI-for-India organized by GUVI Geek and AICTE.

IIT Madras Certified Python Course   2021
· Completed an in detailed course on python programming under distance learning by IIT Madras.

Inter School Band Competition   2017
Auxi-Aura
· Second Runner Up in the Auxi Aura 2017 inter-school band competition.