

ARKA GHOSH

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EDUCATION

Digital University Kerala (Formerly IIITM-K)	2022 - 2024
<i>M.Sc. Computer Science with specialization in Cybersecurity</i>	-
Asutosh College, University of Calcutta	2019 - 2022
<i>B.Sc. Computer Science</i>	8.713 CGPA
Kalyani Public School	2017 - 2019
<i>Higher Secondary Education CBSE</i>	91%
St. Claret School	2007 - 2017
<i>Secondary Education ICSE</i>	91%

ACHIEVEMENTS AND CERTIFICATIONS

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
<i>Auxi-Aura</i>	
· Second Runner Up in the Auxi Aura 2017 inter-school band competition.	

PROJECTS AND INTERNSHIPS

Internship

- 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>

PUBLICATIONS AND CONFERENCES

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

- Abstract—An individual model is not always sufficient enough to classify an email. Each spam mail has features that distinguish it from any other regular mail. A model might not always use that feature for classification and thus produce erroneous results. It is essential to cross-verify the output of one model, with that of another model. This can be done using the ensemble learning technique. Previously, this was done using the same model repeatedly, or different variants of the model. However, in this paper, we have used four completely different models and used them to perform max voting, to optimize the result. The models used are Support Vector Machine(SVM), Multinomial Naive Bayes(MNB), Random Forest(RF), and Decision Tree(DT). After testing all the possible combinations, we were able to conclude that the combination of SVM, MNB, and DT gives the optimal result.

ONGOING PROJECTS

Research Projects

- Attack Modelling and Analysis to find out the weakest path of the network that needs immediate attention.
- Development of an automated security solution for Software Defined Network (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

Other Skills and Hobbies

- Guitar, Ukulele, Harmonica, Painting, Abacus(Level 8)
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