CSE 543: Information Assurance and Security

Using Blockchain and Machine Learning to significantly improve the security of Cloud-based systems.

Group 14 Weekly Report - 5

Person prepared this report: Sai Greeshma Gandham

Person approved this report: Dheeraj Neela

Person submitted this report: Dheeraj Neela

List of members

1. Dheeraj Neela (Group Leader)
2. Sai Greeshma Gandham (Deputy Leader)
3. Disha Prakash Bhukte
4. Meghana Amirineni
5. Aditi Shashank Joshi
6. Sujana Duvvuri Venkateswarlu
7. Akhil Kumar Gudipoodi

Meeting Notes

1) 02/15/2022 - 7:00 PM

Reviewing the previous week in progress tasks such as exploration of trained data used for supervised learning and ML techniques.

2) 02/17/2022 – 8:00 PM

Review the existing work on using unsupervised ML techniques to detect intrusions and exploration of training data used for unsupervised learning

3) 02/21/2022 – 6:00 PM

Exploring unsupervised ML algorithms such as k-means, DBSCAN and expectation maximization.

Tasks Summary

Task Number	Task Name	Details of Task	Member	Status
1	Reviewing the previous week in progress	Exploration of trained data used supervised learning and ML techniques.	Everyone	Completed
2	Exploration of unsupervised ML techniques	Analyze some existing unsupervised ML techniques	Akhil Kumar Gudipoodi, Meghana Amirineni	Completed
3	Exploration of training data used for unsupervised learning	Did some research on various data.	Sai Greeshma Gandham, Dheeraj Neela	Completed
4	Threats Review	Brainstormed on different threats identified.	Everyone	Completed
5	Reviewing various Web Security vulnerabilities	Overview of SQL injection and types of SQL injections.	Akhil Kumar Gudipoodi and Disha Prakash Bhukte	In progress
6	Reviewing of Distributed Security vulnerabilities	Overview of DOS attack and types involved in it.	Aditi Shashank Joshi, Dheeraj Neela, Sujana	In progress

Task Progress

Task Name	Member	Date of Review	Reviewer(s)	Review Conclusin	Recommended Action
Reviewing the previous week in progress	Everyone	02/15/2022	Everyone	Satisfactory	No Action Required
Exploration of unsupervised ML techniques	Akhil Kumar Gudipoodi, Meghana Amirineni	02/17/2022	Akhil Kumar Gudipoodi, Meghana Amirineni	Needs work	Explore ML Techniques
Exploration of training data used for unsupervised learning	Sai Greeshma Gandham, Dheeraj Neela	02/17/2022	Sai Greeshma Gandham, Dheeraj Neela	Satisfactory	No Action Required
Threats Review	Everyone	02/18/2022	Everyone	Satisfactory	No Action Required
Reviewing various Web Security vulnerabilities	Akhil Kumar Gudipoodi and Disha Prakash Bhukte	02/21/2022	Akhil Kumar Gudipoodi and Disha Prakash Bhukte	Needs Work	Exploring Web Security vulnerabilities
Reviewing of Distributed Security vulnerabilities	Aditi Shashank Joshi, Dheeraj Neela, Sujana	02/21/2022	Aditi Shashank Joshi, Dheeraj Neela, Sujana	Needs Work	Exploring Distributed Security vulnerabilities

Issues

1. No Issues

Gantt chart for showing the major tasks

	Task Name	Feb 13							Feb 20						
		S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	Reviewing the previous week in progress			▬▬▬ Everyone											
2	Exploration of unsupervised ML techniques						▬ Akhil, Meghana								
3	Exploration of training data used for unsupervised learning						▬ Dheeraj, Greeshma								
4	Threats Review						▬▬▬▬▬ Everyone								
5	Reviewing various Web Security vulnerabilities						▬▬▬▬▬ Akhil, Disha								
6	Reviewing of Distributed Security vulnerabilities						▬▬▬▬▬ Aditi, Dheeraj, Sujana								