CSE 543: Information Assurance and Security

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

Group 14 Weekly Report - 4

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Person approved this report: Dheeraj Neela

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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) 02/09/2022 - 7:00 PM

Exchanging the papers gathered by everyone and dividing them for more research about the threats in Cloud Systems.

2) 02/12/2022 – 8:00 PM

Collaborate and brainstorm on different types of threats.

3) 02/14/2022 – 6:00 PM

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

Tasks Summary

Task Number	Task Name	Details of Task	Member	Status
1	Gathered research papers related to Blockchain.	Analyze some existing cloud-based detection systems using block chain	Meghana Amirineni and Sujana Duvvuri Venkateswarlu	Completed
2	Gathered research papers related to Machine Learning	Analyze some existing cloud-based detection systems using machine learning	Akhil Kumar Gudipoodi	Completed
3	Study related to common threats and vulnerabilities	Did some research on various threats to data.	Sai Greeshma Gandham, Dheeraj Neela	Completed
4	Threats Review	Brainstormed on different threats identified.	Everyone	Completed
5	Division of threats among the team members	Distributed the threats among the team to deep dive and gain detailed understanding of them.	Dheeraj Neela	Completed
6	Exploration of training data used for supervised learning	Gather understanding around the data to be used for training and how the data has been generated.	Akhil Kumar Gudipoodi and Disha Prakash Bhukte	In progress
7	Exploration of supervised ML techniques	Examine how different versions of SVM have been used widely for intrusion detection.	Aditi Shashank Joshi, Dheeraj Neela, Sai Greeshma Gandham	In progress

Task Progress

Task Name	Member	Date of Review	Reviewer(s)	Review Conclusion	Recommended Action
Sharing knowledge on gathered research papers	Everyone	02/09/2022	Everyone	Satisfactory	No Action Required
Threats review	Everyone	02/11/2022	Everyone	Satisfactory	No Action Required
Task Division and finalizing threats	Everyone	02/12/2022	Everyone	Needs work	Explore ML Techniques
ML Techniques Review	Everyone	02/14/2022	Everyone	Needs work	Need to explore more

Issues

1. No Issues

Gantt chart for showing the major tasks