

CSE 543: Information Assurance and Security

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

Group 14 Weekly Report - 7

Person prepared this report: Disha Prakash Bhukte and Aditi Shashank Joshi

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) 03/03/2022 - 7:00 PM

Discussion on DDoS attacks and distribution of topics between the group members.

2) 03/04/2022 - 6:00 PM

Review of DDoS attacks and discussion on the use of ML and Blockchain to mitigate them.

3) 03/07/2022 - 8:00 PM

Review of the use of ML and Blockchain to mitigate DDoS attacks.

Tasks Summary

Task Number	Task Name	Details of Task	Member	Status		
Number						
1	Exploring Blockchain technology	Exploring Blockchain technology to improve cloud security.	Meghana Amirineni, Sujana and Disha Prakash Bhukte	Completed		
2	DDoS Attacks and review	Exploring the DDoS attacks, gathering papers, and brainstorming.	Everyone	Completed		
3	Types of DDoS Attacks	Identifying types of DDoS Attacks.	Sai Greeshma Gandham	Completed		
4	DDoS Attacks in Cloud Computing	Identifying types of DDoS Attacks in cloud computing.	Aditi Shashank Joshi and Dheeraj Neela	Completed		
5	Use of ML to Mitigate DDoS Attacks	Researching the ML techniques which are used for preventing DDoS attacks.	Akhil Kumar Gudipoodi and Disha Prakash Bhukte	In Progress		

6	Use of Blockchain to mitigate DDoS Attacks	Researching the Blockchain techniques which are used for preventing DDoS attacks.	Sujana and Meghana Amirineni	In Progress

Task Progress

Task Name	Member	Date of Review	Reviewer(s)	Review Conclusion	Recommended Action
Exploring blockchain	Meghana Amirineni, Sujana and Disha Prakash Bhukte	03/03/2022	Sai	Satisfactory	No Action
technology to improve cloud			Greeshma		Required
security			Gandham, Aditi		
			Shashank		
			Joshi and Akhil Kumar Gudipoodi		
Review of DDoS Attacks and its types	Sai Greeshma Gandham	03/04/2022	Dheeraj Neela, Aditi Shashank Joshi, Sujana	Satisfactory	No Action Required
Review of DDoS Attacks in Cloud Computing	Aditi Shashank Joshi and Dheeraj Neela	03/04/2022	Disha Prakash Bhukte and Akhil Kumar Gudipoodi	Satisfactory	No Action Required
Review of ML Techniques for prevention of DDoS attacks	Disha Prakash Bhukte and Akhil Kumar Gudipoodi	03/07/2022	Meghana Amirineni, Sujana, Aditi Shashank Joshi	Needs Work	Needs more research

Review of the use of Blockchain for preventing DDoS Attacks	Meghana Amirineni, Sujana	03/07/2022	Disha Prakash Bhukte, Akhil Kumar Gudipoodi and Sai	Needs Work	Needs more research
			Greeshma Gandham		

Issues

1. No Issues

Gantt chart for showing the major tasks

	Task Name		Feb 27					Mar 6							
		S	М	Т	W	Т	F	S	S	М	Т	W	Т	F	S
1	Exploring blockchain technology to improve cloud secur						Me	ghan	a Am	irine	ni, S	ujana	and	Dish	ıa Pr
2	Review of DDoS Attacks and its types							Sai	Gree	shm	a Ga	ndha	am		
3	Review of DDoS Attacks in Cloud Computing							Adit	i Sha	asha	nk Jo	shi a	nd D	heer	aj N€
4	Review of ML Techniques for prevention of DDoS attacl										Dis	ha Pr	akas	h Bh	ukte
5	Review of the use of Blockchain for preventing DDoS A										Ме	ghan	a Am	irine	ni, Sı