uOttawa
Faculty of Engineering

ELG7186
AI for Cybersecurity Applications
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Theme Selection

Group 15

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Selected Problem

We would use different GANs architecture and approaches that has been implemented and assessed on real world cybersecurity problem, then our contribution would be to improve the architecture to effectively detect (malware, botnet, DDoS, etc.)

The problem we will deal with

Nowadays Systems constantly face the risk of trying to steal their data, trap and track their critical information from cyber-attackers using many methods, one of which is to spread malware in the network to pull network data, so we should generate a machine or deep learning model to detect that malware, there are models exist detect intrusions and malware, but are not sufficient to make data much secure, we aim to enhance the accuracy using GANs approaches to developed Stronger model capable of detecting them in a more accurate way.

how to deal with?

We would train a GAN based model to generate **Intrusion Detection System (IDS)** which is a system to detect intrusions and malicious activity on the network.