

Research Presentation Topic

Network Intrusion Detection Systems

Background:

Network Intrusion Detection Systems (NIDS) have become essential for medium to large scale organizations due to the increase of internet connected devices. The amount of data and services associated with money that is stored on enterprise networks has grown exponentially over the last decade. New methods of protecting this data are becoming necessary due to increased number of attacks and potential threats.

What I'll cover:

- What are NIDS?
- What are the types of NIDS?
 - How are they being implemented?
 - Cellular Automata
 - Genetic Algorithms
 - Neural Networks
 - Bioinformatics
 - Network-Level Emulation
 - Possibly more...
- What are the types of attacks?
 - Most common methods
 - Polymorphism
 - Obfuscation
 - Targeted Ports
 - Statistics