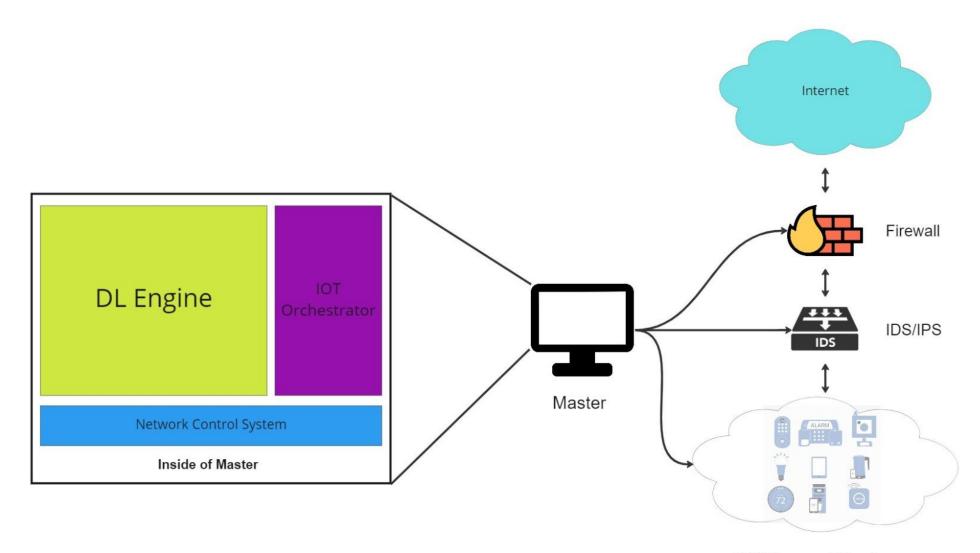# Deep Learning based IOT Network Attack Detection System
By TOTEMM

1. DIONA is An attack detection system that utilizes Deep learning technology to be able to detect security threats anomalies that a normal attack detection system cannot.

2. DIONA consists of three layers:
    1. Fog layer (Contains the IoT swarm)
    2. Security layer (Contains a static IDS)
    3. DL Engine Layer (Contains an advanced DL powered anomaly detection system).

Internet

DL Engine

IOT
Orchestrator

Network Control System

Inside of Master

Master

Firewall

IDS/IPS

IDS

IOT Swarm / Fog Layer