



Announces the Ph.D. Dissertation Defense of

# Ahmed Alrefaei

for the degree of Doctor of Philosophy (Ph.D.)

## “MULTICLASS CLASSIFICATION TECHNIQUE TO DETECT IOT ATTACKS IN REALTIME”

September 12, 2024, 10:30a.m. to 12:00p.m.  
Engineering East building Room #05  
777 Glades Road  
Boca Raton, FL

**DEPARTMENT:**

Department of Electrical Engineering and Computer Science

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**ABSTRACT OF DISSERTATION**

Dissertation Title

MULTICLASS CLASSIFICATION TECHNIQUE TO DETECT IOT  
ATTACKS IN REALTIME

Internet of Things (IoT) has undergone remarkable expansion in recent years, leading to a proliferation of devices capable of connecting to the internet, collecting data, and sharing information. However, this rapid growth has also introduced a myriad of security challenges, resulting in an uptick in cyber attacks. Researchers have been actively

developing robust Intrusion Detection Systems (IDS) utilizing various machine learning (ML) techniques. This dissertation presents a novel approach, a combination of three distinct approaches toward IoT intrusion detection, including a novel approach (STM)

