

Title: DDoS Attack and Defense: Trends and Research

Opportunities

Date: 2023-10-23 2:00~4:00 pm

Location: 銘珠講堂

Speaker:蕭旭君/國立臺灣大學資訊工程學系

Hosted by: 阮文龄 助理教授

## **Abstract:**

DDoS attacks thrive on the current Internet, which did not prioritize security. Over the past decade, DDoS attacks have grown in both volume and sophistication. This rapid growth can be attributed to the amplification techniques that magnify the attack size, and the rise of IoT devices that provide attackers with a large number of easily exploitable bots. Moreover, DDoS attacks become more economically efficient and are harder to attribute to the actual attacking source. In this talk, we will introduce several new types of DDoS attacks and explore defense approaches ranging from prevention to resilience. We will conclude this talk with research challenges and opportunities, such as transitioning from best-effort mitigation to reliable and meaningful guarantees, and from ad-hoc evaluation and to reproducible and ecologically valid evaluation methods.