Network and Information Security

Course Content: This course introduces fundamental knowledge of cryptography and its applications to network and information security. It provides an overview of basic concepts and protocols for network and information security. It also covers on emerging security and privacy issues in mobile computing/networking systems (such as 5G/IoT, edge computing, smart sensing, and mobile AI). Students will read and present recent research papers in the field of network and information security.

Prerequisites: CIS 3329 or CIS 4319 or CIS 5003 and graduate standing

Time: Tuesday 5:30pm-8:00pm via Zoom Meeting

Instructor: Dr. Yu Wang, wangyu@temple.edu


A reading list, including electronic copies of the papers, will be provided for some topics.

Tentative Course Outline: The following topics will be covered as time permits:
- Introduction to Network and Information Security
- Symmetric Encryption and Message Confidentiality
- Public Key Cryptography and Message Authentication
- Key Distribution and User Authentication
- Web Security and Email Security
- IP Security and Intrusion Detection
- Wireless Security and IoT Security
- Security and Privacy in Mobile AI, Smart Sensing and Edge Computing