



E0 338 August 3:1

Topics in Security and Privacy

Instructor

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Department: CSA

Course Time: Tue, Thu, 3:30 - 5:00 PM

Lecture venue:

Detailed Course Page:

Announcements

Brief description of the course

Recent technological advances in diverse domains such as CPS/IoT, cloud storage and computation, quantum information processing as well as proliferation of tools for digital mass surveillance have thrown up many interesting research problems. This course focuses on some of the theoretical questions in Security and Privacy from a cryptographic perspective.

Prerequisites

Good performance in E0 235 (Cryptography) and consent of the instructor.

Syllabus

The course covers a subset of the following topics:(A) Cryptographic Security in a Post-Quantum World.(B) Design and Analysis of Privacy Enhancing Tools.(C) Efficient, Secure and Verifiable Query Processing in Outsourced Database.(D) Cryptocurrency, Smart Contracts, Blockchain and Applications.

Course outcomes

This is a research course in Cryptographic Security and Privacy. By crediting the course a student is expected to acquaint her/him-self with recent advances in the research areas covered in this course.

Grading policy

Grading is based on seminar, project work and reports.

Assignments

Resources