CS 625 Foundations of Distributed Computing Course Outcomes

Each course outcome is followed in parentheses by the Program Outcome to which it relates.

Models - Articulate relative advantages and drawbacks of the main types of formal models for a distributed system (synchronous vs. asynchronous timing model, shared memory vs. message passing interprocess communication mechanism). ()

Impossibility Results - Describe algorithms and/or impossibility results for typical abstract problems in distributed computing (consensus, communication, resource allocation, synchronization) in the different system settings. ()

Practice of Distributed Computing - Recognize the occurrence of (a variant of) one of the typical abstract problems in a practical setting, and apply the known solution or argue about its impossibility based on known results. ()

Requirements of Distributed Systems - Reason formally about the requirements of a distributed algorithm. ()

Complexity Measures - Identify appropriate complexity measures and analyze solutions to a distributed computing problem accordingly. ()