PMRF-ISSS Teaching Programme

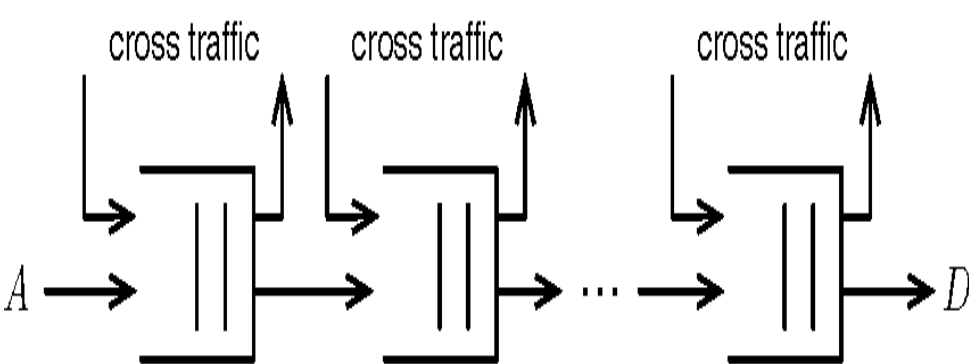Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems

Module PMRF- ISSS073/II/2023

Deterministic Network Calculus

Name of the PMRF student

Aniket Mukherjee

Required background of the students taught

Any post graduate students from computer science, communication and electrical engineering background. Interested in queuing systems

TANDEM NETWORK MODEL.

Details of the content of the module

Network Calculus is a counterpart for queuing theory. We will learn to model server and arrival processes using (min, plus) algebra. We will also learn properties of the same.

- **Chapter 1:** Basic Model- Single server, single flow

- **Chapter 2:** The (min, plus) Functions semi-ring

- **Chapter 3:** Sub-Classes of functions

- **Chapter 4:** Efficient computations for (min, plus) Operators

Schedule of the module

Mon, Wed, Fri (7:00 AM - 8:00 AM)

Starts on: Dec 04, 2023. (Monday).

Meeting link : Will be shared later

Contact email ID: isss.forum@gmail.com

Registration link:
https://docs.google.com/forms/d/e/1FAIpQLSdzNESPOWFjCboz6QCdjpqcJHLF53Uto0g5nLldo-sm9AN-lA/viewform?usp=sf_link