



UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

INSPEM WEEKLY SEMINAR

20/2019

Date & Time

11 June 2019 (Tuesday) @ 10.30 am

Venue

Al-Farabi Seminar Room, Second Floor, INSPEM

Presenters

Assoc. Prof. Dr. R. Sundara Rajan
Hindustan Institute of Technology & Science
Chennai, India

Embedding in Interconnection Networks

Dr. T.M. Rajalaxmi
SSN College of Engineering
Chennai, India

Some Mathematical aspects in Machine Learning

ABSTRACT

10.30 am - 11.30 am | Embedding in Interconnection Networks

Graph embedding is an important technique that maps a guest graph into a host graph, usually an interconnection network. Many applications can be modeled as graph embedding. In architecture simulation, graph embedding has been known as a powerful tool for implementation of parallel algorithms or simulation of different interconnection networks. The quality of an embedding can be measured by certain cost criteria, namely dilation, congestion and wirelength. In my talk, I am going to focus on wirelength followed by the dilation of an embedding.

11.30 am - 12.30 pm | Some Mathematical aspects in Machine Learning

Machine learning is the study of data – driven methods capable of understanding and aiding human and biological information processing tasks. In this pursuit, many related issues arise such as how to compress data, interpret and process it. These methods are not directly mimicking human processing but rather to enhancing it such as in predicting the stock market or retrieving information rapidly. Probability theory is key since inevitably our limited data and understanding of the problem forces us to address uncertainty. So, I am going to present some probability concepts which are useful to model the machine learning problems.