



Communications Society and Signal Processing Society Joint Chapter of IEEE Hyderabad Section, and

The Teaching Learning Centre, Indian Institute of Technology, Hyderabad present



**Workshop on
Fundamentals of Matrix Analysis
using Octave software**



Programme

Topic:

Fundamentals of Matrix
Analysis using Octave

Speaker:

GVV Sharma
Asst. Prof., Dept. of Electrical
Engineering
IIT, Hyderabad

Date:

Saturday
9th April, 2016

Time:

10 am to 3 pm

Venue:

EE Lab, IIT Hyderabad
Kandi, Hyderabad
<http://bit.ly/1KMVS0I>

Registration:

Free, but seats are limited.
Prior registration is
compulsory.
Send email to
gadepall@iith.ac.in

Abstract

The workshop aims to introduce the fundamentals of matrix analysis through the freely available software OCTAVE in the simplest possible manner. Concepts like eigenvalue decomposition, gram-schmidt orthogonalization, singular value decomposition and quadratic forms will be explained by solving a matrix equation through a least-squares approach. Applications to signal processing and communications will also be discussed. This unique approach will be extremely useful especially to faculty for teaching/research. The workshop is organized by the Teaching Learning Centre of IIT, Hyderabad with the lead instructor being GVV Sharma.

Instructor Biography

Dr. GVV Sharma is an Assistant professor at the Department of Electrical Engineering, Indian Institute of Technology Hyderabad. He received his PhD in Electrical Engineering from Indian Institute of Technology, Bombay and M.Sc.(Engg.) from Indian Institute of Science, Bangalore. and B.Tech from Indian Institute of Technology, Guwahati.

Before joining IIT Hyderabad as a faculty, he was employed in the software industry. He works on wireless technologies, but has a passion for developmental engineering: taking technology to the masses.

Dr. Sharma is the current Vice-Chair of the Comsoc/SPS Joint Chapter of IEEE Hyderabad section.

Instructions

This workshop is tailored for faculty of engineering colleges. The workshop is free of charge and open to all those interested. However, preference will be given to IEEE Members. All confirmed registrants would have to bring with them fully charged laptops.