Working with MATLAB – A Hands-on Workshop

MATLAB is a high-level software for numerical computation and visualization. It is easy to use, and has become the defacto computational tool of choice at educational institutions and many industries around the world. In this one-day workshop, MATLAB will be introduced and explored. Participants will learn the components and fundamentals of MATLAB. The bulk of the time will be spent working through examples.

COURSE OBJECTIVE

On the successful completion of this course, the participants should be able to

- use MATLAB to perform mathematical calculations,
- use MATLAB to define and manipulate scalars, vectors, and matrices,
- use pre-defined functions in MATLAB,
- effectively use the in-built help to accelerate the pace of learning,
- use MATLAB to visualize data by producing appropriate plots, and
- write simple MATLAB programs.

COURSE OUTLINE

1. Introduction
2. MATLAB User Interface Layout
3. Working with Variables
4. Visualizing Data
5. Programming (script & function files)

DATE

Thursday April 13, 2017

REGISTRATION

Contact: myspsoc@ieee.org;
      myspsoc@gmail.com
Website: https://goo.gl/xpGT8H
Deadline: Wednesday April 05, 2017

Course material provided.
Certificate from IEEE Signal Processing Society Malaysia Chapter given.
Morning/afternoon refreshments and lunch included.

TARGET AUDIENCE

undergraduate and postgraduate students,
academicians and researchers,
engineers and scientists

VENUE

BL-3-010, Control Systems Laboratory,
College of Engineering,
UNITEN, Putrajaya Campus.

FEES

Students (IEEE Member)	RM 200
Students (Non-IEEE Member)	RM 250
IEEE Member	RM 300
Non-IEEE Member	RM 350

SPEAKERS PROFILE

Syed Khaleel Ahmed is a senior lecturer in the Department of Electronics and Communication Engineering at Universiti Tenaga Nasional (UNITEN), Putrajaya campus. He obtained his B.E. in Electrical and Electronics Engineering from the College of Engineering, Guindy, Anna University, Chennai, India, and his M.S. in Electrical and Computer Engineering from the University of Massachusetts at Amherst, USA. His experience spans over 25 years in industry and academia.

His industrial experience includes stints at Thermax Limited, Pune, India, and Quantum Corp., Shrewsbury, Massachusetts. His M.S. thesis was on the design of *Robust Controllers for Flexible Structures*. This was part of a project funded by NASA through Martin Marietta. At Quantum Corporation, he worked on servo control for hard disk drives. One of the projects he completed at Quantum, *Designing a Control Systems Measurement Utility*, was adopted as a standard. An earlier project on *system identification using MATLAB* in both the time-domain and the frequency-domain was accepted and successfully used by Quantum control system engineers.

At UNITEN, he has worked on several projects, both funded and unfunded. He has over 30 publications in the last 3 years. He has also conducted several workshops for participants from industry and academia on topics in *Control Systems, Signal Processing, and Numerical Techniques* including using MATLAB/Simulink for implementing these. Currently he is the *Head* of the Center for Signal Processing and Control Systems (*CSPaCS*).

His areas of specialization and interest are *Robust Control, Fuzzy Logic and Control, Algorithms, Signal & Image Processing, and Numerical Techniques*. He is also interested and active in promoting open source software, especially LaTeX for professional document preparation and publishing.

He is the treasurer of the IEEE Signal Processing Society Malaysia Section, and an executive committee member of the IEEE Control Systems Society Malaysia Section, and the IEEE Education Society Malaysia Section. He is also a member of International Association of Computer Science and Information Technology (IACSIT), Singapore, International Association of Engineers (IAENG), Hong Kong, and Indian Society of Technical Education (ISTE), India.

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