# **Undocumented Matlab**

unbelievable features; unbelievable quality; unbelievable cost effectiveness; unbelievable service

## **CONNECTING MATLAB TO EXTERNAL HW/SW SYSTEMS**

#### **COURSE OUTLINE**



- a. Interfacing with external COM/DCOM server applications
- b. Interfacing with Microsoft Office to prepare custom reports
  - Excel, Word, PowerPoint
- c. Using MATLAB as a COM server for external clients
- d. Using ActiveX controls in MATLAB GUI

#### 2. Interfacing MATLAB with Java

- a. Using Java for:
  - Networking
  - Database connectivity
  - Data collection
  - Algorithms
- b. Integrating external APIs (class/JAR files)
- c. Integrating Java controls in MATLAB GUI:
  - Swing
  - MathWorks widgets
  - JIDE
  - 3rd-party controls

#### 3. Additional Technologies

- a. Dot-Net components
- b. External libraries (DLLs, SOs)
  - Adapting 3<sup>rd</sup>-party libraries for use in MATLAB
  - Data type-casting issues
  - Data buffering
  - Avoiding common pitfalls
- c. Internet/intranet webpages

#### 4. Where next?

- topics and resources for further learning



A 1-day Matlab course.

You will learn how to:

- Connect MATLAB applications to a variety of external software and hardware
- Connect MATLAB to external applications such as Excel, Word and PowerPoint, useful for reports preparation

### Target audience

Matlab users of any level, from beginners to advanced, who wish to improve their program's functionality and usability.

This course is intended for intermediate and experienced MATLAB users. MATLAB programming experience is assumed.