

Upcoming workshop

Image Analysis with Matlab

Date: Wednesday May 20, 2015

Time: 1:00PM - 4:30PM

Cost: No Charge

Location: ETLC 2-005 University of Alberta



Instructors: Denise Thornton and Dr. Jon Johansson

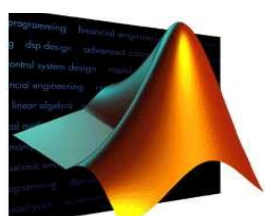
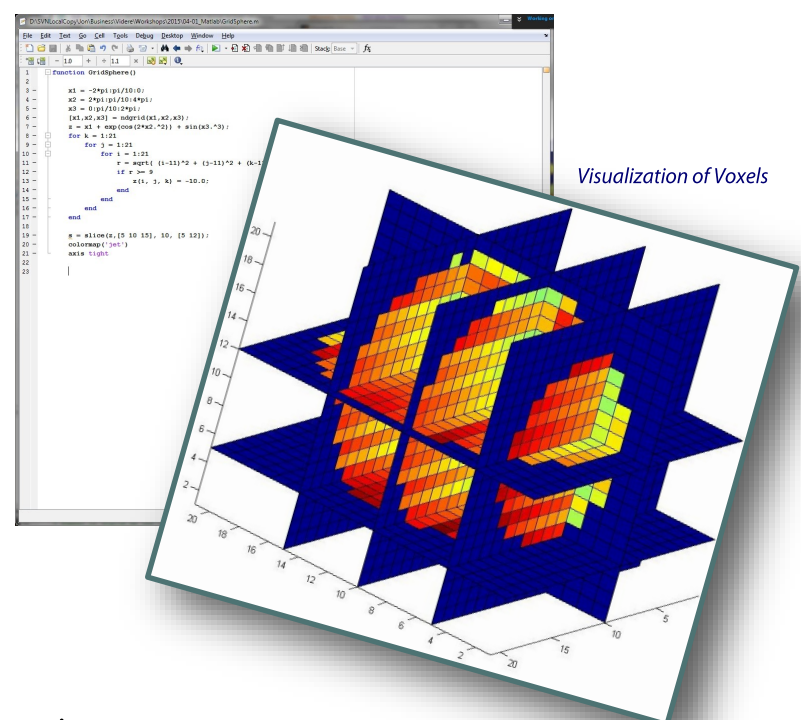
Description: This hands-on workshop presents principles and methods for analyzing images including those from x-rays, photographs and tomography. The discussion will focus on using the image processing tool box in Matlab, but the concepts apply to image processing and analysis tools from other packages. We will start with an overview of Matlab, then we will discuss techniques used in Image Analysis

We will begin with a brief introduction to Matlab, including:

- ◆ Matlab interface components
- ◆ Variable types
- ◆ Create and run an m-file (script)
- ◆ Working with arrays

Then we will work through examples using intensity based and morphological operations in order to segment objects of interest from a data set, such as:

- ◆ Histograms
- ◆ Thresholding
- ◆ Binary and morphological operations
- ◆ Discussion of extending the analysis to 3D , as time permits.



MATLAB
The Language of Technical Computing
The MATH WORKS

Some programming experience is recommended for this course.

Who should attend? Researchers with an interest in data analysis and image analysis.

The venue is a computer lab and the machines are powerful enough to do the exercises. You are welcome to bring your own laptop and use it for the exercises. If you are bringing your own laptop you will need have to Matlab with the Image Processing toolbox. You will need to have a UofA CCID to access the lab machines and the campus network.

Workshop sponsored by the Advanced Materials & Processing Laboratory, University of Alberta.

Register online: <http://videreanalytics.ca/events/image-analysis-with-matlab-may-20-2015/>

