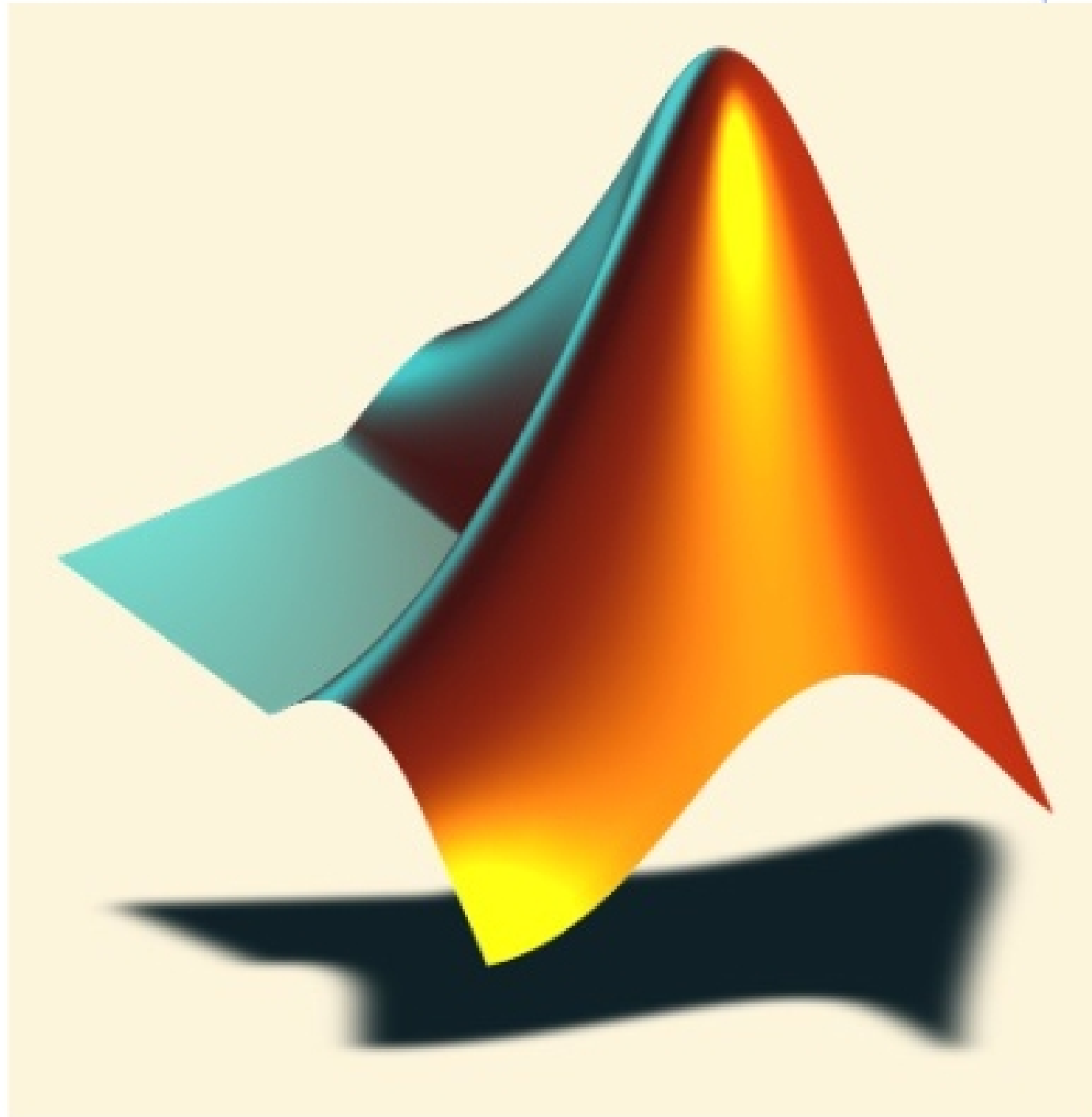


# **MATLAB Tutorial**

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# Before getting started...



## **Acknowledgement:**

- Almost entirely, this tutorial compiled from bits of information gathered from various internet sources
  - ◆ It is available for download from SBEL website in PPT format
    - <http://sbel.wisc.edu/documents/workshopMatlabSept2009.pptx>
  - ◆ Please let me know of any mistakes you find
    - email me at [heyne@wisc.edu](mailto:heyne@wisc.edu)



## **The right frame of mind:**

- You will not be able to say at the end of workshop that you know MATLAB but rather that you have been exposed to MATLAB (I don't know MATLAB myself, I'm just using it...)
  
- Use MATLAB's "help", this is your first stop
- Second stop: search the web for examples that come close to what you need
  - ◆ You learn how to use MATLAB by using it, that's why the start might be slow and at times frustrating

# Contents

- What is Matlab?
- MATLAB Components
- MATLAB Desktop
- Matrices
- Importing and Exporting Data
- Elementary math with MATLAB
- M-file Programming
  - Functions vs. Scripts
  - Variable Type/Scope
  - Debugging MATLAB functions