Introduction to MATLAB

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What are your requirements?

- Could your work benefit from using built-in mathematical functions fundamental to solving engineering and scientific problems?
- Are you interested in using an interactive environment ideal for iterative exploration, design, and problem solving to help you work more effectively?
- Do you have questions about how you can quickly explore ideas, gain insight into your data, and document and share your results?
- Are you looking for ways to enhance your workflow through re-use and automation?

Discover answers to these and other questions…

Session Highlights:

1. Access and Review the Data
2. Import the Data
3. Visualize and Explore the Data
4. Determine Amount of Data to be Used for Analysis
5. Implement Analysis of Data
    - Working with Data from Multiple Files
6. View a Report of the Analysis
7. Next Steps - Available Resources

Next Steps – Getting Started with MATLAB

- Review the “fromData2insights.pdf” file for detailed demo results
- Use the “fromData2insightsDemo.mlx” in MATLAB to run the demo code
- Learn more about MATLAB:
  - https://www.mathworks.com/products/matlab/getting-started.html

Available Self-Paced Training Courses

Get started

MATLAB Onramp

Simulink Onramp

Deep Learning Onramp

Stateflow Onramp

Machine Learning Onramp

12 hours of FREE content – available for everyone

Core MATLAB

MATLAB Fundamentals

MATLAB Programming Techniques

Over 80 hours of comprehensive MATLAB learning content

- Interactive learning environment provides the experience of using the product
- Automated assessment and feedback
- Measurable progress report and completion certificate
- 24/7 availability
- No cancellation or travel required

Data Science

MATLAB for Data Processing and Visualization

Machine Learning with MATLAB

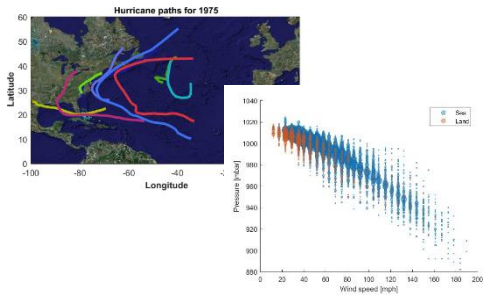
Deep Learning with MATLAB

MATLAB Fundamentals and Beyond

MATLAB Fundamentals

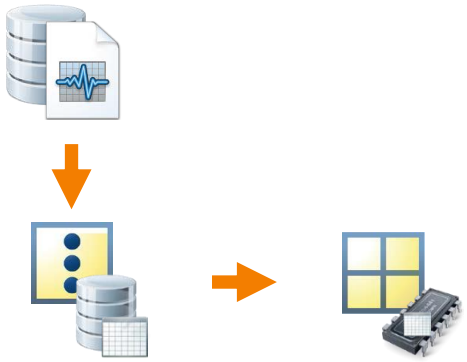
MATLAB for Data Processing and Visualization (1 Day)

- Import data, process data
- Customize visualizations
- Work with irregular data



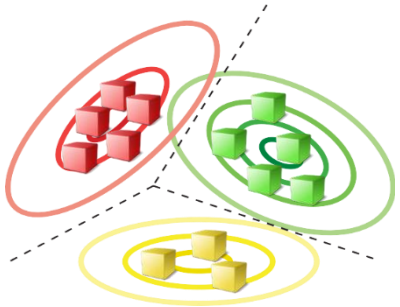
Processing Big Data with MATLAB (1 Day)

- Creating datastores
- Manipulating big data
- Working with clusters



Machine Learning with MATLAB (2 Days)

- Discover natural patterns
- Create predictive models
- Improve models

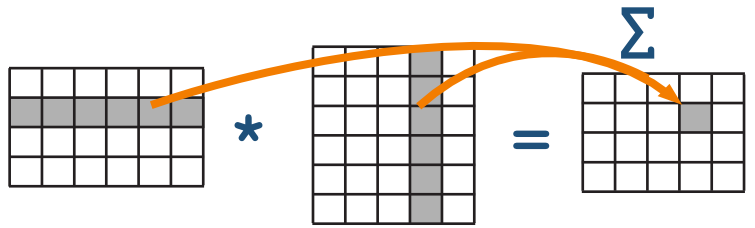


Upcoming Training Schedule

- MATLAB Fundamentals
  - Oct 6-8 (EDT)
  - Oct 13-15 (EDT Spanish)
  - Oct 20-22 (PDT)
- MATLAB for Data Processing and Visualization
  - Nov 18 (EDT)
- Machine Learning with MATLAB
  - Sep 22-23 (PDT)
  - Nov 12-13 (EDT)
  - Oct 20-22 (PDT)
- Processing Big Data with MATLAB
  - Nov 17 (PDT)

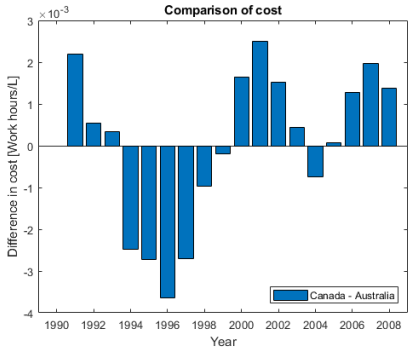
Find out more about training schedule

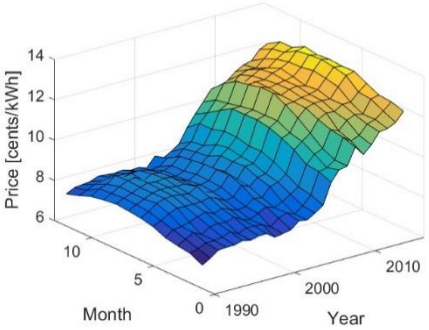
MATLAB Fundamentals

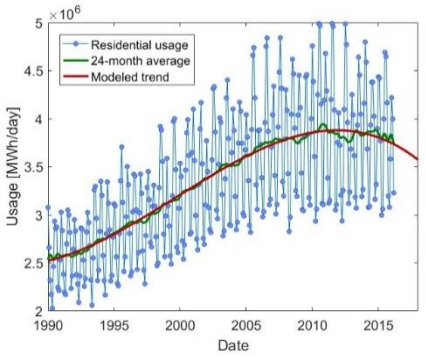


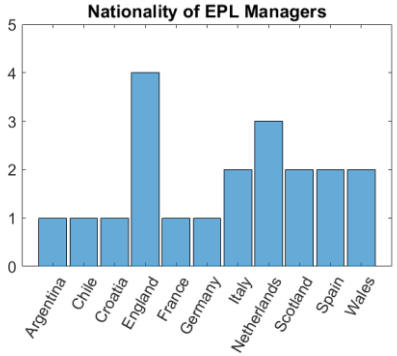
After this 3-day course you will be able to:

- Import, analyze, and export data
- Write programs to automate complex tasks
- Perform calculations and data analysis with vectors and matrices
- Create informative data visualizations









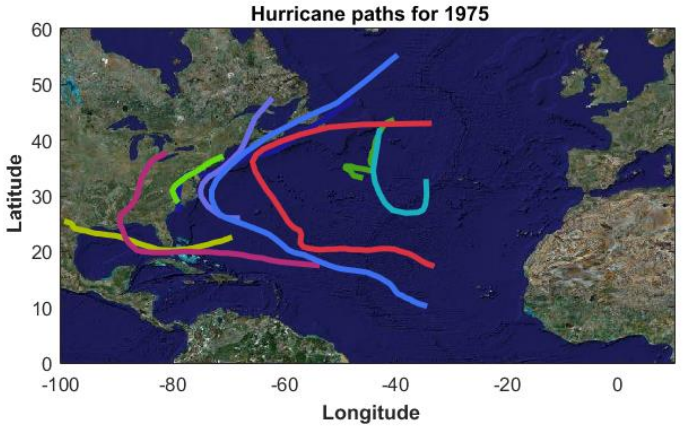
[See detailed course outline]

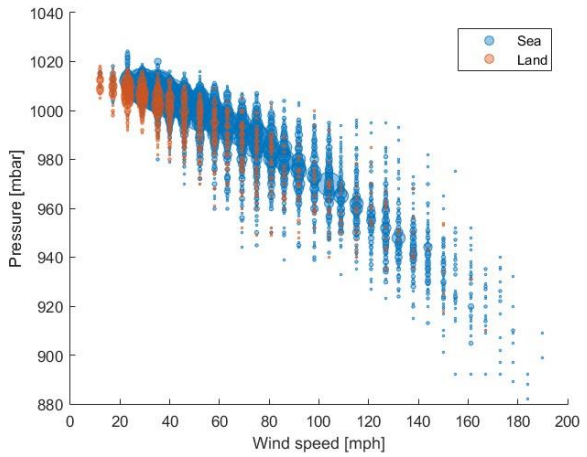
MATLAB for Data Processing and Visualization

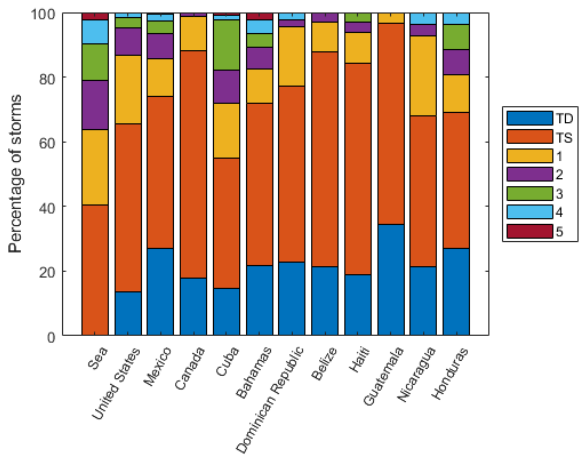
After this 1-day course you will be able to:

- Import data
- Process data
- Customize visualizations
- Work with irregular data

[See detailed course outline]



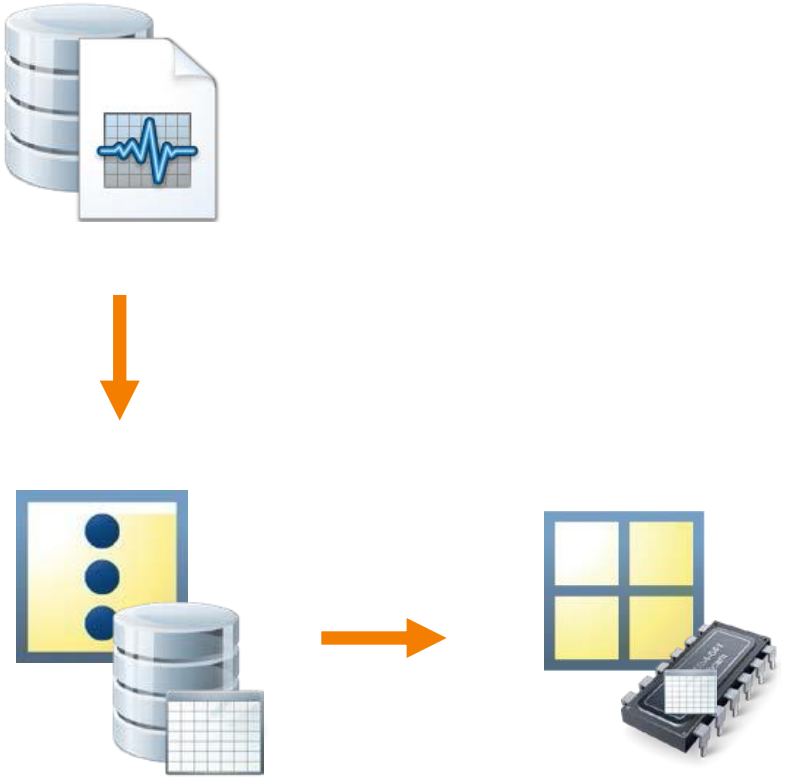




Processing Big Data with MATLAB

Topics included in this 1-day course:

- Creating datastores
- Manipulating big data using tall arrays
- Importing custom data formats
- Applying custom functions to tall arrays
- Working with clusters and cloud environments

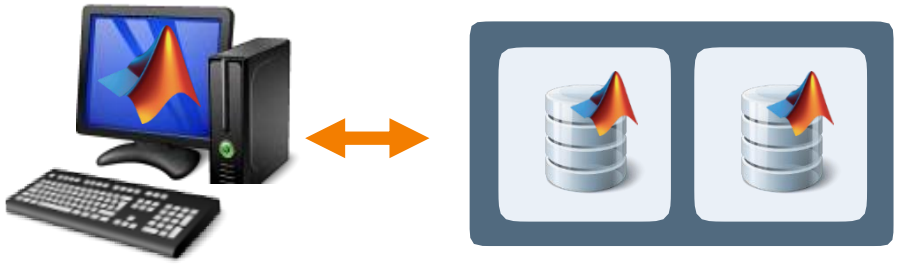


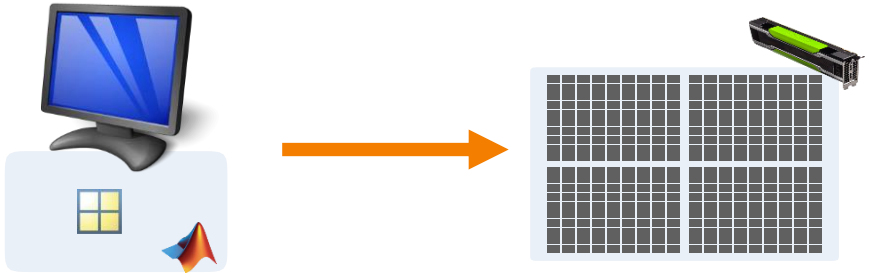
See detailed course outline

Accelerating and Parallelizing MATLAB Code

Topics included in this 2-day course:

- Improving performance of MATLAB code
- Generating MEX-files
- Parallelizing computations
- Offloading execution
- Working with clusters
- GPU computing





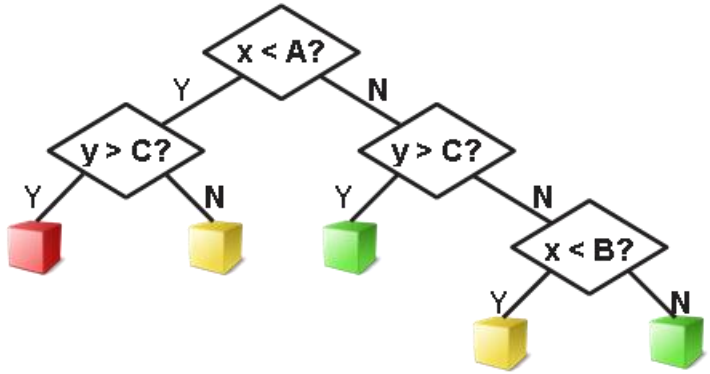
[See detailed course outline]

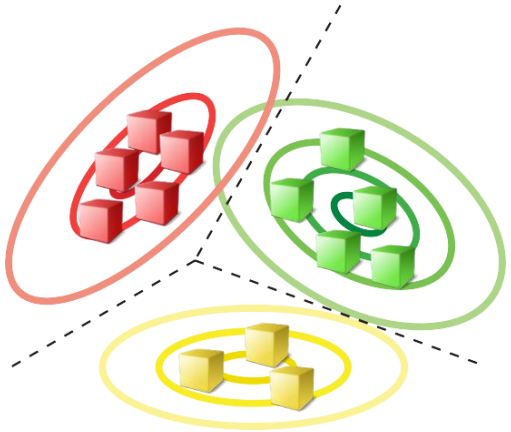
Machine Learning with MATLAB

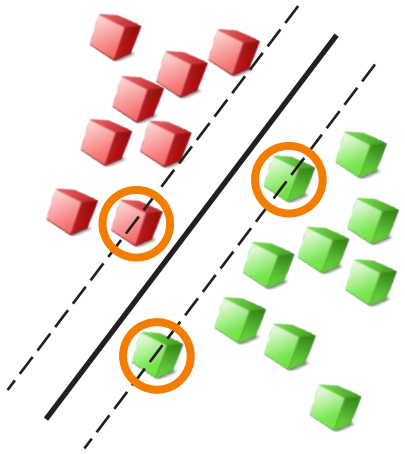
After this 2-day course you will be able to:

- Discover natural patterns in data
- Create predictive models
- Validate the predictions of a model
- Simplify and improve models

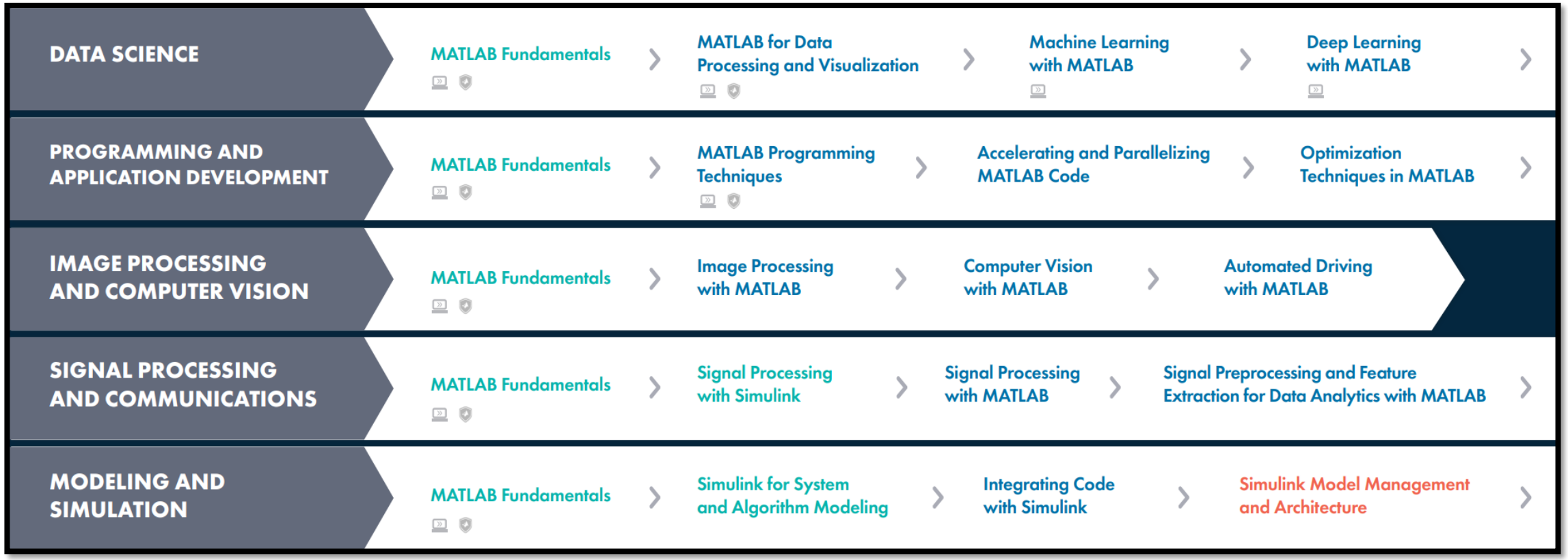
[See detailed course outline]







Get Started on the Right Path



- Find out more about Course Catalogue & Curriculum Path

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- 144% average increase in competence

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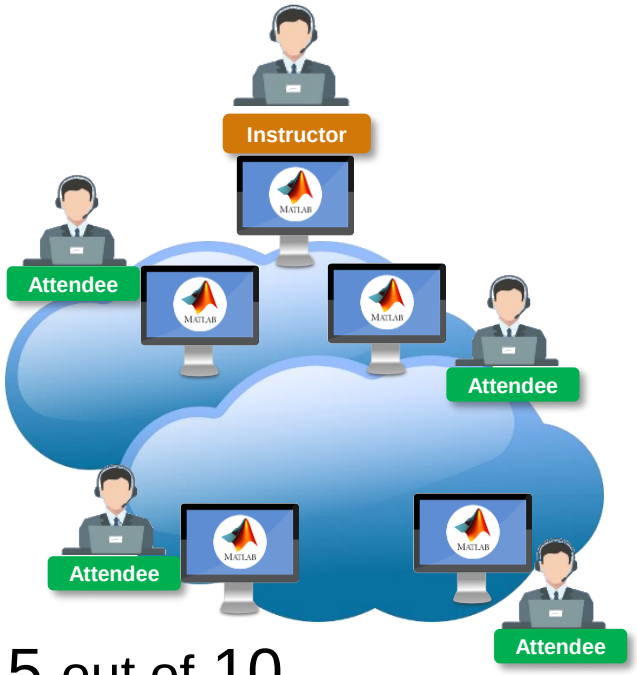
- 98% rating as subject matter experts
- 96% of attendees recommend to others

Take Your Training Virtually



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- Overall customer satisfaction similar to in class training of 8.5 out of 10
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"I attended two online trainings hosted by MathWorks. I was impressed with the virtual learning format. The instructor did an outstanding job presenting course material and facilitating attendee understanding."

Matt Fisher, Ultradent Products, USA

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