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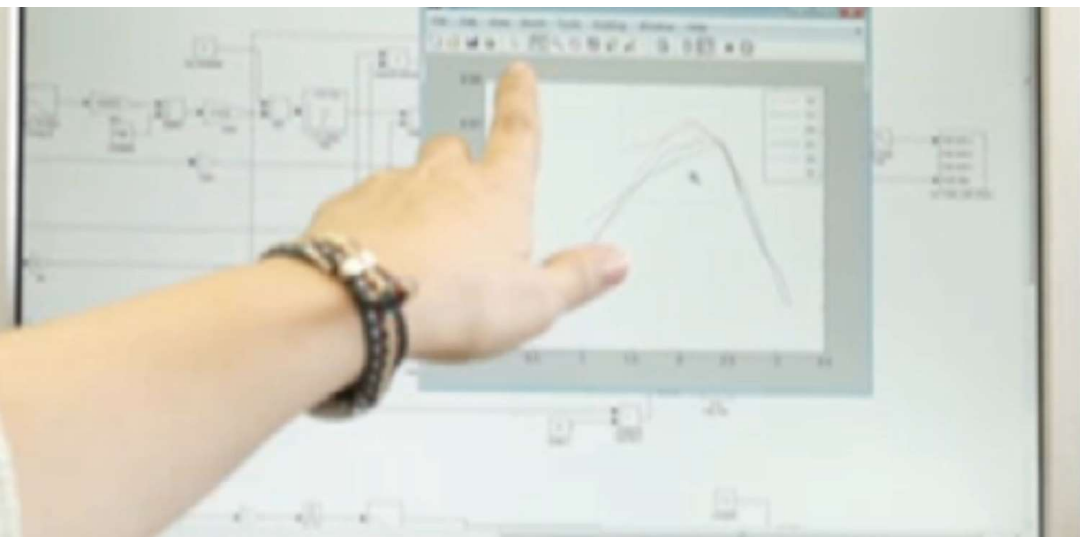
As the sole distributor in Southeast Asia for MathWorks Inc, developer of the MATLAB® and Simulink® family of products, we provide organizations and businesses with a variety of the best tools, products and services to facilitate innovations. Our clients include many research and development institutes as well as multinational companies operating in this region.



TechSource Systems currently has offices in Singapore, Malaysia, Thailand, Vietnam and Philippines, with its headquarters based in Singapore. We are an ISO 9001:2008 certified company and has been awarded the Singapore's Outstanding Enterprise 2013 Award.



Ascendas Systems Co., Ltd. Born on 2018. 100% Subsidiary of Techsource Systems Pte Ltd (Singapore). Sole Distributor of Mathworks Products including Training & Services since 1996. Ascendas Systems Thailand Authorized by Mathworks



Deep roots in Education

“Everyone who comes in as a new hire already knows MATLAB, because they all had it in college. The learning curve is significantly lessened as a result.”

Jeff Corn, Chief of Engineering Projects Section U.S. Air Force

More than **3.9 million students and over 1,200 universities** around the world—including the top 10 ranked universities—have unlimited access to MATLAB and Simulink with a Campus-Wide License.



HANDS-ON LEARNING

92,500

Faculty and students using MATLAB to program hardware

“On multidisciplinary projects, students with quite different educational backgrounds can work together more easily because they are using the same tools.”

Professor Jakob Stoustrup, Aalborg University



JOB OPPORTUNITIES

82%

Fortune 100 companies with a MATLAB license

“If you want to work at Google, make sure you can use MATLAB.”

*Jonathan Rosenberg,
Senior Vice President of Products, Google*



RESEARCH PRODUCTIVITY

2,570,000

Google Scholar results referencing MATLAB

“Our teams are here to do world-class research, and easy access to MATLAB enables them to be their most productive.”

*Shailesh Shenoy, Director of Research Computing,
Albert Einstein College of Medicine of Yeshiva University*

Campus-Wide License Program Overview



University & lab computers



Online access



Personal Computers



Mobile Devices



Get Software | Learn MATLAB | Teach with MATLAB | What's New

MATLAB Access for Everyone at
University

MATLAB
& SIMULINK

Where could MATLAB and Simulink take you?

82% of all Fortune 100 companies use MATLAB,
which means that you'll take your ideas beyond the classroom to
help drive new technology and advance your career.

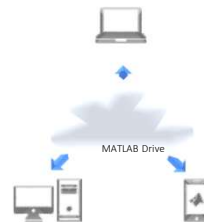
- License covers all faculty, staff, students and their devices
- Access on campus, in lab and field, and at home, including off-network
- Multiple device online and offline
- Immediate tool availability for end users via self-serve portal
- Yearly License
- There are more than 100 Toolboxes which versatile for many solution
- Academic Online Training Suite
- MATLAB Parallel Server



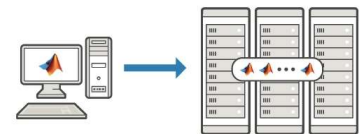
MATLAB Academy



Self-paced
online learning



Cloud Storage &
Sharing



Clusters & HPC

Campus-Wide License Program Overview



University & lab computers



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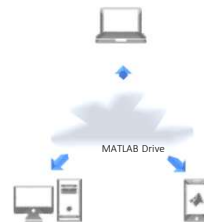
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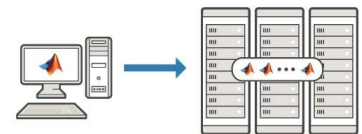
MATLAB Academy



Self-paced
online learning



Cloud Storage &
Sharing

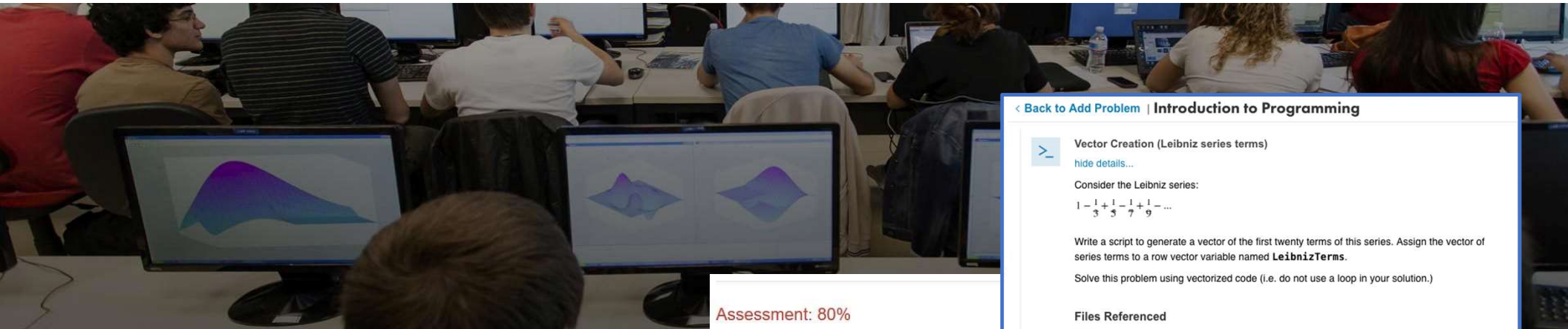


Clusters & HPC

Campus-Wide License Product List Version R2020b

1. MATLAB	26. Deep Learning Toolbox	51. Model-Based Calibration Toolbox	71. SerDes Toolbox	96. Spreadsheet Link
2. *MATLAB Grader	27. DSP System Toolbox		72. Signal Processing Toolbox	97. Stateflow
3. *MATLAB Parallel Server	28. Econometrics Toolbox	52. Motor Control Blockset	73. SimBiology	98. Statistics and Machine Learning Toolbox
4. *MATLAB Production Server	29. Embedded Coder	53. Navigation Toolbox	74. SimEvents	99. Symbolic Math Toolbox
5. *MATLAB Web App Server	30. Filter Design HDL Coder	54. OPC Toolbox	75. Simscape	100. System Composer
6. *Polyspace Bug Finder	31. Financial Instruments Toolbox	55. Optimization Toolbox	76. Simscape Driveline	101. System Identification Toolbox
7. *RoadRunner	32. Financial Toolbox	56. Parallel Computing Toolbox	77. Simscape Electrical	102. Text Analytics Toolbox
8. Online Training Suite	33. Fixed-Point Designer	57. Partial Differential Equation Toolbox	78. Simscape Fluids	103. Trading Toolbox
9. Simulink	34. Fuzzy Logic Toolbox	58. Phased Array System Toolbox	79. Simscape Multibody	104. UAV Toolbox
10. 5G Toolbox	35. Global Optimization Toolbox	59. Polyspace Code Prover	80. Simulink 3D Animation	105. Vehicle Dynamics Blockset
11. Aerospace Blockset	36. GPU Coder	60. Powertrain Blockset	81. Simulink Check	106. Vehicle Network Toolbox
12. Aerospace Toolbox	37. HDL Coder	61. Predictive Maintenance Toolbox	82. Simulink Code Inspector	107. Vision HDL Toolbox
13. Antenna Toolbox	38. HDL Verifier	62. Reinforcement Learning Toolbox	83. Simulink Coder	108. Wavelet Toolbox
14. Audio Toolbox	39. Image Acquisition Toolbox	63. RF Blockset	84. Simulink Compiler	109. Wireless HDL Toolbox
15. Automated Driving Toolbox	40. Image Processing Toolbox	64. RF Toolbox	85. Simulink Control Design	110. WLAN Toolbox
16. AUTOSAR Blockset	41. Instrument Control Toolbox	65. Risk Management Toolbox	86. Simulink Coverage	
17. Bioinformatics Toolbox	42. Lidar Toolbox	66. RoadRunner Asset Library	87. Simulink Design Optimization	
18. Communications Toolbox	43. LTE Toolbox	67. Robotics System Toolbox	88. Simulink Design Verifier	
19. Computer Vision Toolbox	44. Mapping Toolbox	68. Robust Control Toolbox	89. Simulink Desktop Real-Time	
20. Control System Toolbox	45. MATLAB Coder	69. ROS Toolbox	90. Simulink PLC Coder	
21. Curve Fitting Toolbox	46. MATLAB Compiler	70. Sensor Fusion and Tracking Toolbox	91. Simulink Real-Time	
22. Data Acquisition Toolbox	47. MATLAB Compiler SDK		92. Simulink Report Generator	
23. Database Toolbox	48. MATLAB Report Generator		93. Simulink Requirements	
24. Datafeed Toolbox	49. Mixed-Signal Blockset		94. Simulink Test	
25. Deep Learning HDL Toolbox	50. Model Predictive Control		95. SoC Blockset	

MATLAB Grader



Create interactive course assignments



Automatically grade student work and provide feedback



Run your assignments in any learning environment

Assessment: 80%

✓ Is cross-sectional area correct?

✓ Is the Modulus of Elasticity correct?

✓ Is yield strength calculated correctly?

✓ Is ultimate strength correct?

✗ Is fracture strength correct?

Variable fracture has an incorrect value.

Verify that:

- strain data starts at 0 mm/mm, and stress starts at 0 Pa. Correct the raw data if necessary.
- fracture is assigned a stress value with units of Pa

< Back to Add Problem | Introduction to Programming



Vector Creation (Leibniz series terms)

[hide details...](#)

Consider the Leibniz series:

$$1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \dots$$

Write a script to generate a vector of the first twenty terms of this series. Assign the vector of series terms to a row vector variable named **LeibnizTerms**.

Solve this problem using vectorized code (i.e. do not use a loop in your solution.)

Files Referenced

None

Problem Type

Script

Code

[Reference Solution](#) [Learner Template](#)

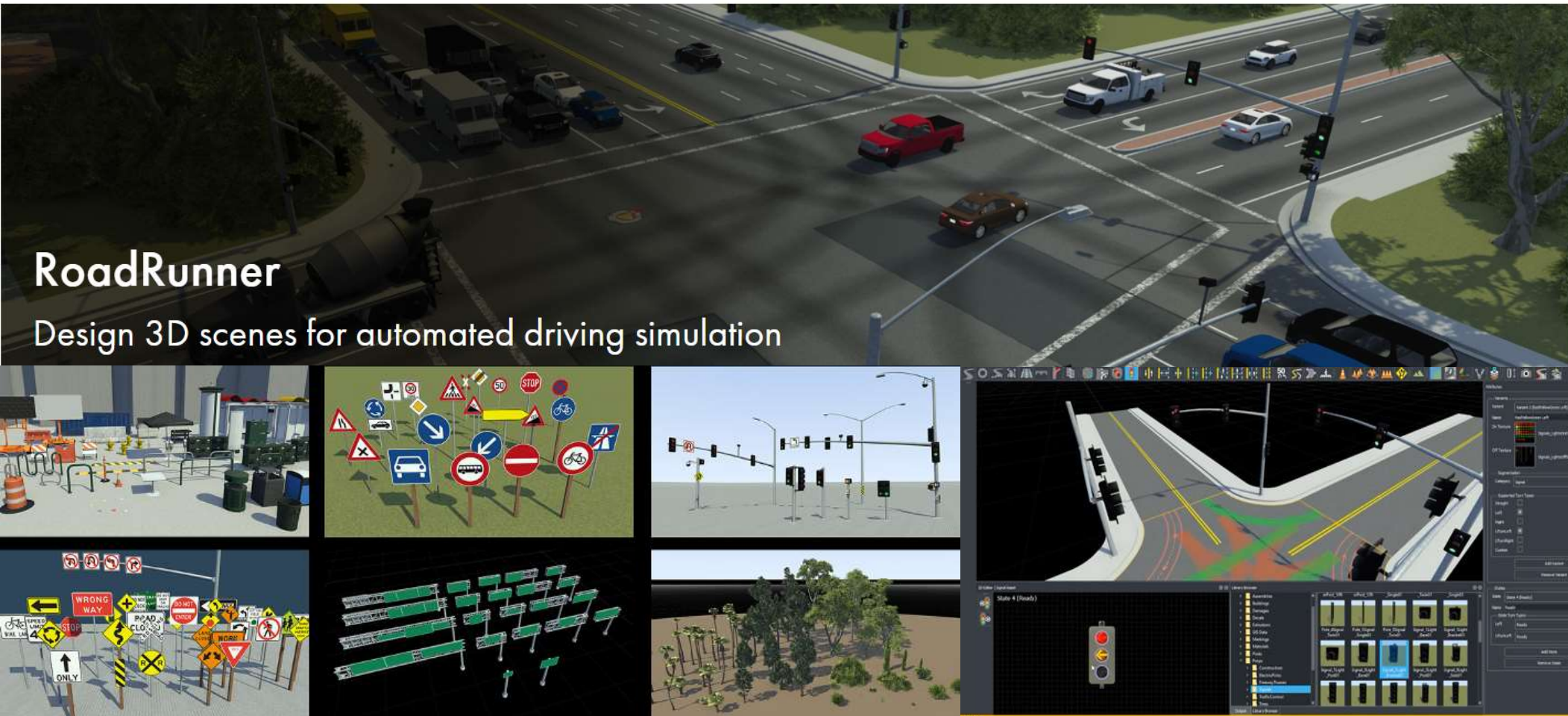
```
1 k = 0:19;  
2 LeibnizTerms = (-1).^k ./ (2 * k + 1);
```

Total: 80% (100%)

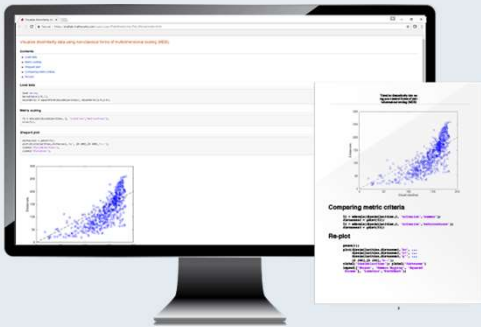
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Access MATLAB with a web browser



MATLAB Mobile

Access MATLAB on iOS/Android devices

Visit your university MATLAB portal

Visit matlab.mathworks.com

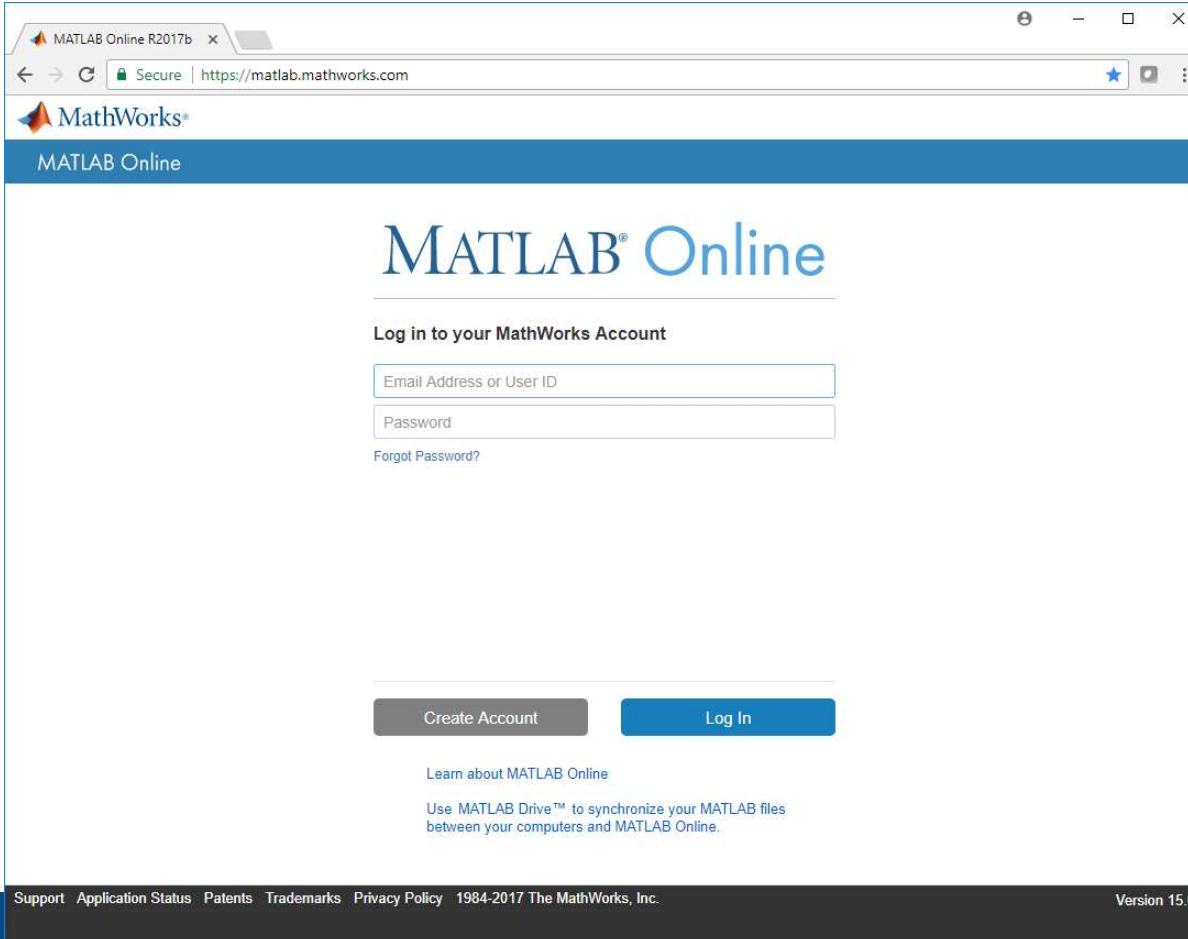


No Downloads or Installations

MATLAB Online able to use similar to MATLAB on Desktop from standard web browser



MATLAB Online - Use MATLAB through Your Browser



MATLAB Online R2017b

Secure | https://matlab.mathworks.com

MathWorks®

MATLAB Online

MATLAB® Online

Log in to your MathWorks Account

Email Address or User ID

Password

[Forgot Password?](#)

Create Account Log In

[Learn about MATLAB Online](#)

Use MATLAB Drive™ to synchronize your MATLAB files between your computers and MATLAB Online.

Support Application Status Patents Trademarks Privacy Policy 1984-2017 The MathWorks, Inc. Version 15.0

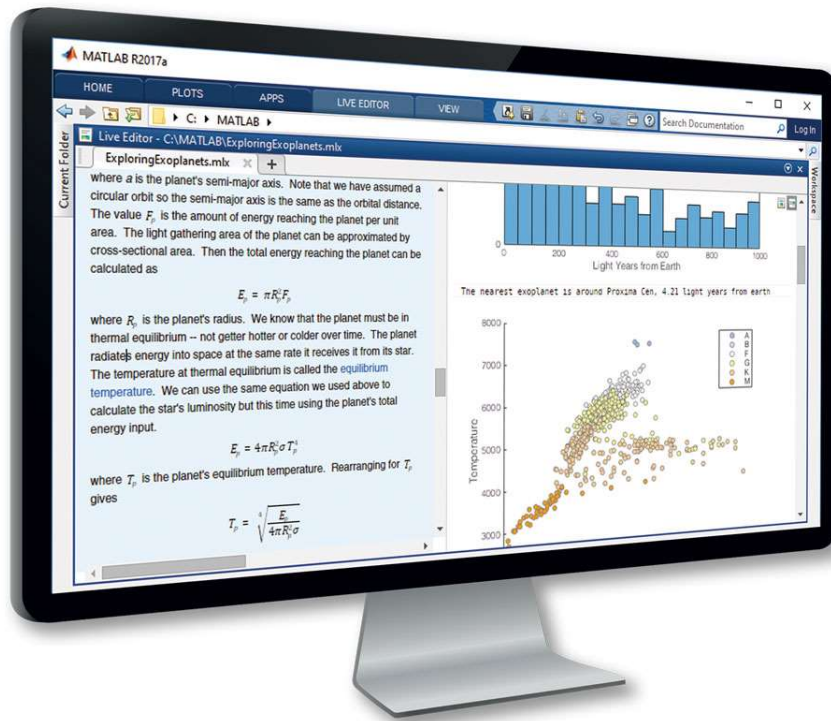
- No downloads
- No setup
- No installation
- No maintenance

- Just sign in at

**matlab.mathworks.com or your
University MATLAB Portal**

- Use it anywhere, anytime, on any computer, laptop or Chromebook

Teach with MATLAB Live Editor



MATLAB in an Executable Notebook

Use live scripts to create **engaging lectures** that combine explanatory text, mathematical equations, code, and results

Share live scripts directly with colleagues or students

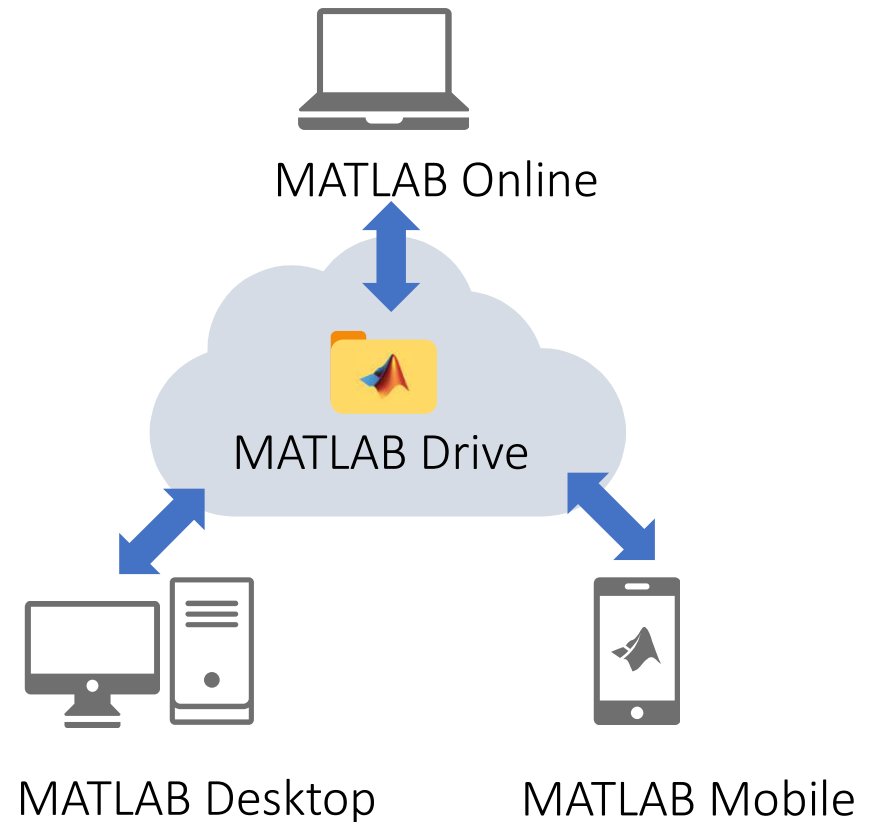
Work in a **single environment** to eliminate context switching

Cloud Storage and Synchronization



MATLAB Drive Hosted on MathWorks Cloud

- MATLAB Online provides access to 5GB of online storage through MATLAB Drive
- Access and synchronize your files with MATLAB Online, MATLAB Mobile, MATLAB Drive online, and MATLAB on your desktop
- Access hardware through the cloud
 - Raspberry Pi through wireless connection
 - IoT devices through ThingSpeak
 - Mobile sensors through MATLAB Mobile



MATLAB Parallel Server for Campus-Wide License

Included in Full Suite

- **One license, unlimited scaling for the entire campus**

- HPC centers and central clusters can enable entire clusters
- Researchers and departments can set up their own MATLAB clusters
- Self-serve cloud options are enabled



- **Simplify license administration by consolidating**






- For HPC, a single network activation can accommodate multiple clusters of any size
- Researchers self-serve with online licensing once you add them as Licensed End Users

To use new model with any release

1) get updated license file and update network license manager **OR** 2) use online licensing

Campus-wide Access - Online Training Suite

Get started

 FREE	 FREE	 FREE	 FREE	 FREE
MATLAB Onramp	Simulink Onramp	Deep Learning Onramp	Machine Learning Onramp	Stateflow Onramp

11 hours of FREE content—available for everyone

Computational Mathematics

				
Solving Nonlinear Equations with MATLAB	Solving Ordinary Differential Equations with MATLAB	Introduction to Linear Algebra with MATLAB	Introduction to Statistical Methods with MATLAB	Introduction to Symbolic Math with MATLAB

9 hours of short courses on computational mathematics topics

Core MATLAB

		
MATLAB Fundamentals	MATLAB Programming Techniques	MATLAB for Financial Applications

Data Science

		
MATLAB for Data Processing and Visualization	Machine Learning with MATLAB	Deep Learning with MATLAB

Over 80 hours of comprehensive MATLAB learning content

MATLAB and Simulink Training

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Other available classes:

Dates	Course	Location	Language	Price	Register
On Demand	 MATLAB Fundamentals 180 days of full access from the day of purchase	Self-Paced	Japanese	USD 500	
On Demand	 MATLAB for Financial Applications 180 days of full access from the day of purchase	Self-Paced	Spanish	USD 500	
On Demand	 MATLAB for Financial Applications 180 days of full access from the day of purchase	Self-Paced	English	USD 500	
On Demand	 Deep Learning with MATLAB 180 days of full access from the day of purchase	Self-Paced	Japanese	USD 350	
On Demand	 Deep Learning with MATLAB 180 days of full access from the day of purchase	Self-Paced	English	USD 350	
On Demand	 Machine Learning with MATLAB 180 days of full access from the day of purchase	Self-Paced	English	USD 350	
On Demand	 MATLAB for Data Processing and Visualization 180 days of full access from the day of purchase	Self-Paced	English	USD 200	
On Demand	 MATLAB Programming Techniques 180 days of full access from the day of purchase	Self-Paced	English	USD 350	

Campus Wide License Program
 Offer FREE !!

https://www.mathworks.com/training-schedule/training_cart/add_class

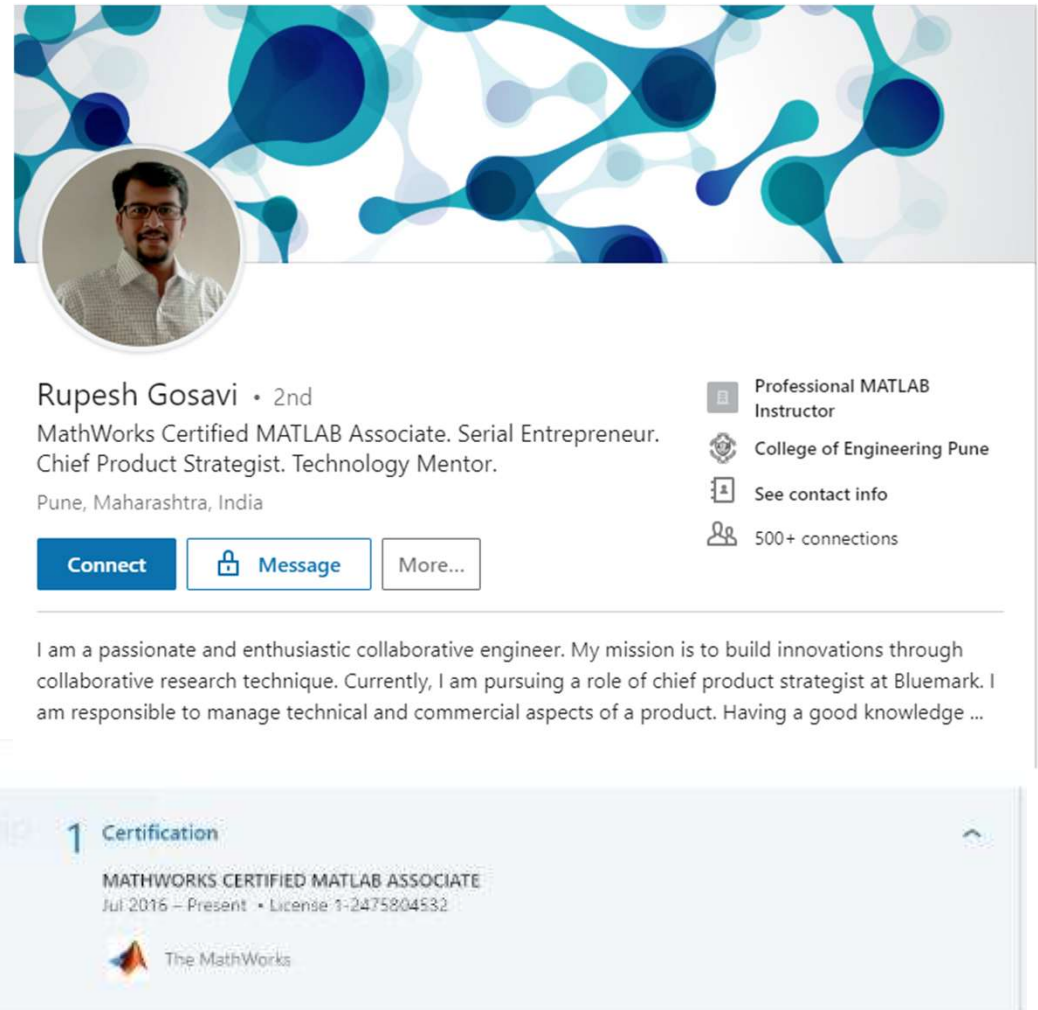
MATLAB Certification

Certification sets individuals apart in the job market and can help accelerate professional growth

Two paid levels of certification are offered:

Certified MATLAB Associate
Certified MATLAB Professional

Share credentials on platforms such as [LinkedIn](#)



The image shows a LinkedIn profile for Rupesh Gosavi. The header features a blue and white abstract pattern. The profile picture is a circular portrait of a man with glasses and a beard. The name 'Rupesh Gosavi' is followed by '• 2nd'. The bio states: 'MathWorks Certified MATLAB Associate. Serial Entrepreneur. Chief Product Strategist. Technology Mentor.' The location is 'Pune, Maharashtra, India'. There are three buttons: 'Connect', 'Message' (with a lock icon), and 'More...'. On the right, there are four items: 'Professional MATLAB Instructor', 'College of Engineering Pune', 'See contact info', and '500+ connections'. Below the profile, there is a section titled '1 Certification' which lists 'MATHWORKS CERTIFIED MATLAB ASSOCIATE' from 'Jul 2016 – Present' with license '1-2475804532'. The MathWorks logo is at the bottom.

Rupesh Gosavi • 2nd
MathWorks Certified MATLAB Associate. Serial Entrepreneur.
Chief Product Strategist. Technology Mentor.
Pune, Maharashtra, India

Connect Message More...

Professional MATLAB Instructor
College of Engineering Pune
See contact info
500+ connections

I am a passionate and enthusiastic collaborative engineer. My mission is to build innovations through collaborative research technique. Currently, I am pursuing a role of chief product strategist at Bluemark. I am responsible to manage technical and commercial aspects of a product. Having a good knowledge ...

1 Certification

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The MathWorks



Course Completion Certificate

Sukanya Wongbandit

has successfully completed 100% of the self-paced training course

MATLAB Onramp



DIRECTOR, TRAINING SERVICES

06 May 2020

MATLAB Courseware

Free sets of course materials developed by faculty from top universities
Curricula available for all STEM disciplines and at multiple levels



Teaching Quantitative Finance and Risk Management with MATLAB

- » Integrate MATLAB into your Quantitative Finance and Risk Management curriculum




Teaching Computational Science Using MATLAB

- » Integrate MATLAB into your robust data analysis, data visualization and exploration curriculum




Teaching Biology with MATLAB

- » Integrate MATLAB into your Biology curriculum



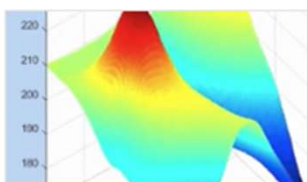
Teaching Calculus with MATLAB

- » Integrate MATLAB into your Calculus curriculum




Teaching Chemistry with MATLAB

- » Integrate MATLAB into your Chemistry curriculum




Teaching Geoscience with MATLAB

- » Integrate MATLAB into your Geoscience curriculum




Teaching Physics with MATLAB

- » Integrate MATLAB into your Physics curriculum




Teaching Psychology and Neuroscience with MATLAB

- » Integrate MATLAB into your Psychology and Neuroscience curriculum



Teaching Data Science with MATLAB

- » Integrate MATLAB into your Data Science curriculum



Teaching Deep Learning with MATLAB

- » Integrate MATLAB into your Deep Learning curriculum

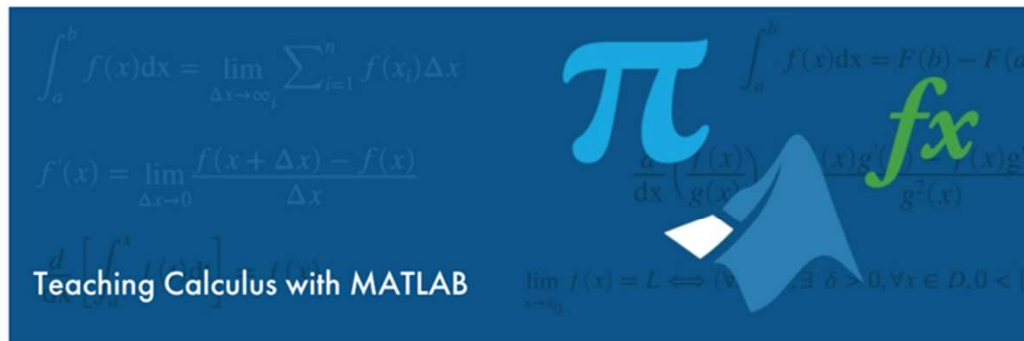


Teaching Econometrics with MATLAB

- » Integrate MATLAB into your Econometrics curriculum

MATLAB Courseware

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Teaching Calculus with MATLAB

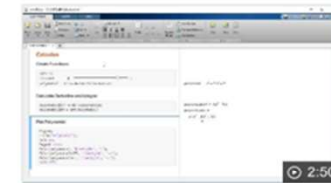
- Allow your students to effortlessly switch among visual, numerical, and algebraic representations of calculus concepts.
- Shift emphasis from manipulative skills to fundamental calculus ideas.
- Improve students' engagement (as well as concept understanding and retention) by exploring more realistic problems earlier.
- Communicate mathematical ideas using a single script that includes explanatory text, formulas, pictures, as well as MATLAB commands, outputs and graphics.
- Use powerful symbolic and numerical routines that don't stand in the way of mathematical thinking.
- Allow your students to easily check results, formulate, test and revise their own hypothesis.
- Allow students to discover calculus truths on their own using inductive as well as deductive reasoning.
- Introduce your students to world-class mathematical software that will help them throughout their studies and careers, thereby increasing their success with calculus and math.

Some Benefits of Using Computation in Calculus Courses:

Research shows that the thoughtful inclusion of computation in calculus courses (Murphy, 2006) provides a dynamic, hands-on, learning environment (Vasquez, 2015), promotes concept understanding (Awang, Zakaria, 2013, Leng et. al. 2009), keeps students engaged (Colonna, Easley, 2011), and increases their competence and confidence (Merriweather, Tharp, 1999).

Course Materials:

Curriculum Usage Examples



Teaching Calculus with MATLAB



MATLAB Anytime, Anywhere



Differential Equations and Linear Algebra, 1.2: The Calculus You Need

MATLAB Courseware

Search MathWorks.com



```
primates.mat  
+ seqlinkage(seqpdist(primates), ...  
le', primates);  
eeviewer(tree);  
ces2 = primates(seqmatch(get(tree, ...  
names', [primates.Header])));  
multialign(primates2);  
lonviewer(ma);
```

Teaching Biology with MATLAB



Educators strive to empower students with the necessary tools to become successful scientists. With MATLAB's built-in functions and easy syntax, integrating computation into coursework is not only feasible but also straightforward. Many educators and researchers have created tools that can be easily incorporated into curriculum.

Course Curricula

- [Modeling and Data Analysis in Life Sciences- University of California, Davis](#)
- [Quantitative Biology Module- University of California, Berkley](#)
- [Boot Camp in Quantitative Methods- Harvard University](#)
- [Data Science for Biologists – University of Washington](#)
- [Theoretical Biology- University of Amsterdam](#)
- [Enzyme Kinetics with MATLAB 1 \(video\)- University of Michigan](#)
- [Enzyme Kinetics with MATLAB 2 \(video\)](#)
- [Other Curriculum Materials](#)

Textbooks

- [Physical Biology of the Cell](#)
- [Mathematics for the Life Sciences](#)
- [Understanding Complex Ecosystem Dynamics: A Systems and Engineering Perspective](#)

Data Science for Biologists – University of Washington

[» Watch the video series](#)

Massachusetts Institute of Technology Integrates Cancer Research in the Lab and Classroom

[» Read the article](#)

You may already have access
to MATLAB through your
university

[» Check now](#)

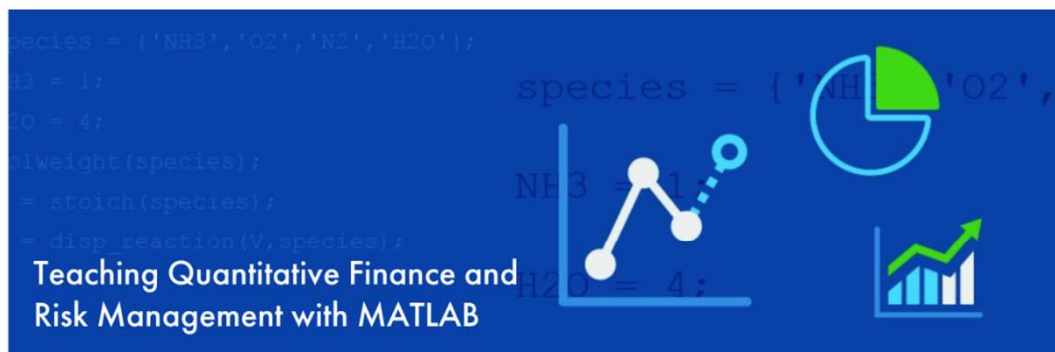
MATLAB Courseware

Search MathWorks.com



```
species = {'NH3','O2','N2','H2O'};
M3 = 1;
M0 = 4;
Mweight(species);
M = stoich(species);
= disp_reaction(V,species);
```

Teaching Quantitative Finance and Risk Management with MATLAB



Because MATLAB makes it easy to learn and apply computational methods in quantitative finance and risk management, educators regularly choose it for teaching. Students and researchers can prototype and validate financial models, accelerate them with parallel processing, and visualize the results. Students can use interactive Live Scripts to express their ideas as computational narratives, including for homework and research projects.

Educators have created several teaching tools and resources for use in finance curricula.

Curriculum Materials

- [Mathematics of Finance \(University of Maryland\)](#)
- [Analytics of Finance \(MIT\)](#)
- [Numerical Methods in Mathematical Finance \(Karlsruhe Institute of Technology\)](#)
- [Numerical Methods in Mathematical Finance 2 \(Karlsruhe Institute of Technology\)](#)
- [Quantitative Risk Management \(Columbia University\)](#)

Textbooks

- [Risk Management and Simulation](#)
- [Numerical Methods in Finance and Economics: A MATLAB - Based Introduction, 2e](#)
- [An Introduction to Financial Option Valuation: Mathematics, Stochastics, and Computation](#)

MATLAB for Quantitative Finance and Risk Management

Learn how MATLAB is used in the financial services industry

Estimating Risk-Neutral Density from Option Prices with a MATLAB App

» [Read the article](#)

Related MathWorks Products

[Database Toolbox](#)
[Datafeed Toolbox](#)
[Financial Instruments Toolbox](#)
[Financial Toolbox](#)
[Optimization Toolbox](#)
[Parallel Computing Toolbox](#)
[Risk Management Toolbox](#)
[Spreadsheet Link \(for Microsoft Excel\)](#)
[Statistics and Machine Learning Toolbox](#)
[Trading Toolbox](#)

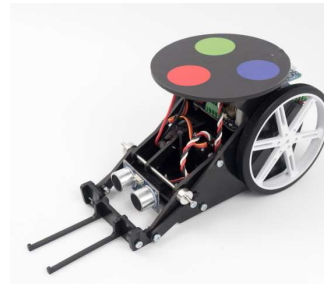
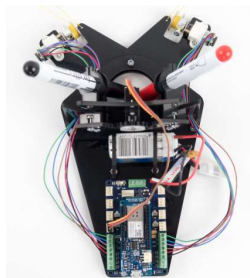
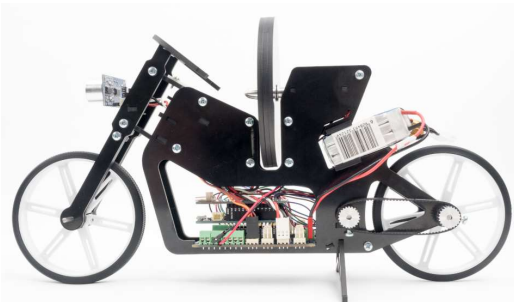
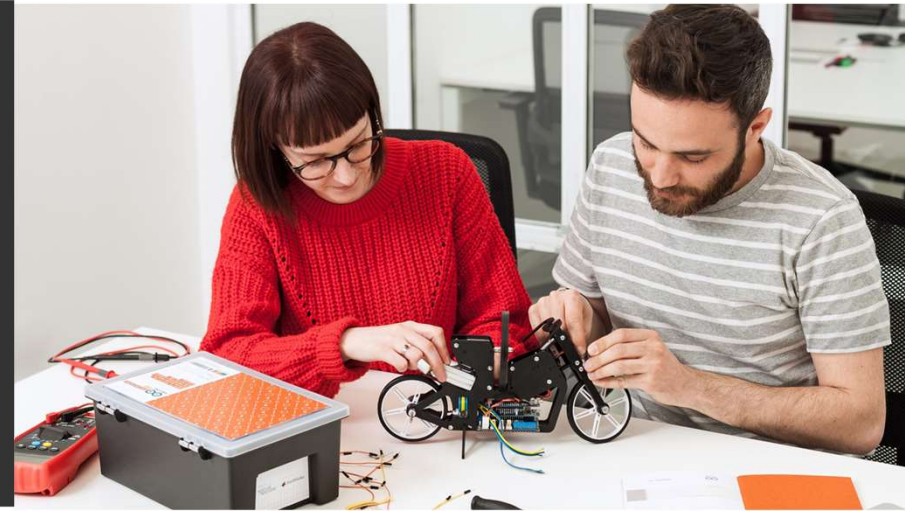
Low-Cost Hardware Curriculum Support for MATLAB

Arduino Engineering Kit

Includes Arduino MKR1000 board and all components to create **three engaging, hands-on projects**:

- self-balancing motorcycle
- mobile rover
- drawing robot

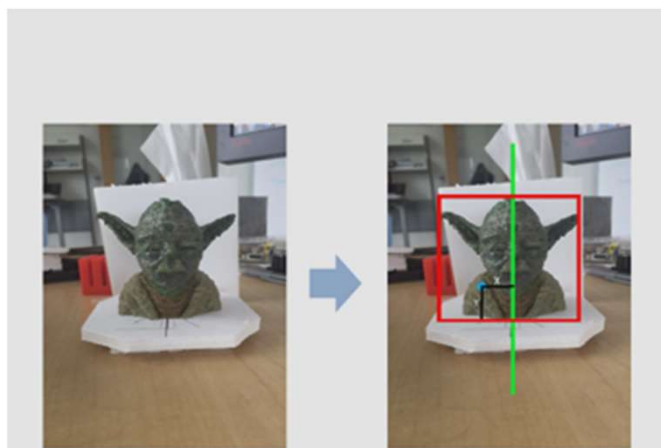
Online learning materials that facilitate project-based learning



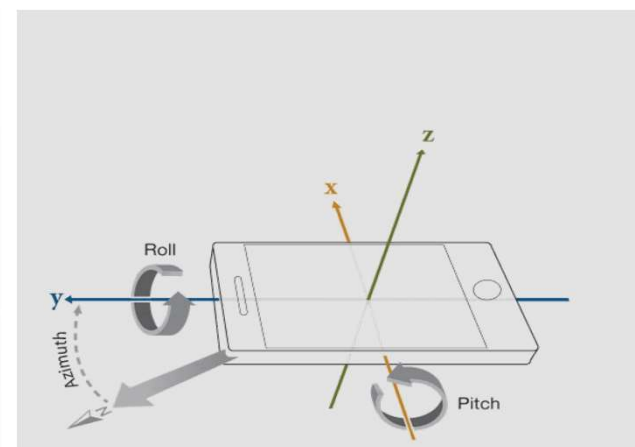
Project-based learning with low-cost hardware



Self-balancing robots using
LEGO and Arduino



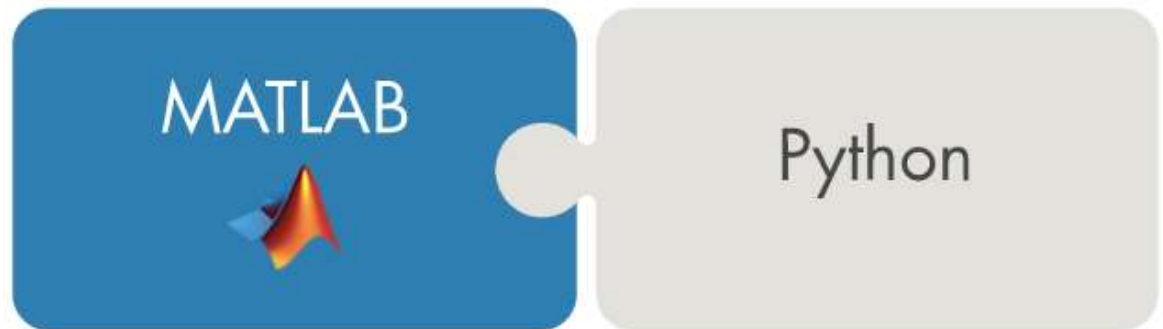
MATLAB based 3D Scanner using
Raspberry Pi



Sensor support for Android
and iOS devices

MATLAB : New Software Development Features

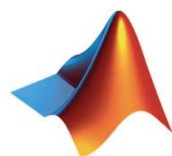
- Call Python libraries in a separate process to avoid library conflicts



SKF

September 16

“Selling MATLAB Where Python is Present”

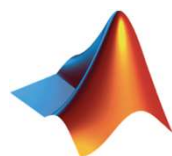


บริษัทที่เป็นลูกค้าของ **MATLAB**



DENSO





บริษัทที่เป็นลูกค้าของ **MATLAB**



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