



# Data-Driven Decision Making A Low-Code Approach

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MATLAB – Create algorithms and AI models for data analysis







**App Building** 



**Parallel Computing** 



Web and Desktop Deployment

**External Language Interfaces** 



**Programming** 

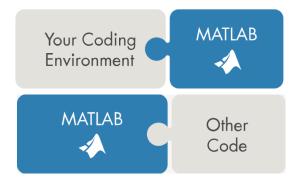


Hardware



MATLAB in the Cloud

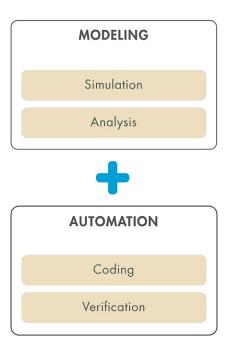
MATLABEXCE Java<sub>C/C++</sub>.exe .NET.dll Python

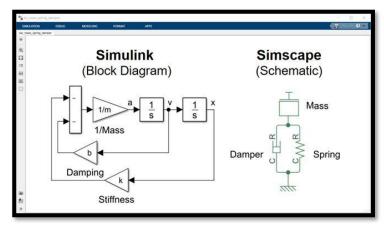




MATLAB – Create algorithms and AI models for data analysis

**Simulink** – Model and simulate complex systems







MATLAB – Create algorithms and AI models for data analysis

Simulink – Model and simulate complex systems

120+ products – for specialized R&D tasks

#### MATLAB Product Family

MATLAB **Code Generation** Embedded Coder Application Deployment Filter Design HDL Coder MATLAB Compiler Fixed-Point Designer MATLAB Compiler SDK GPU Coder MATLAB Production Server HDL Coder MATLAB Web App Server HDL Verifier

Parallel Computing MATLAB Parallel Server Parallel Computing Toolbox

Reporting and Database Access

Database Toolbox MATLAB Report Generator

#### Simulink Product Family

Physical and Event-Based Modeling Simulink SimEvents Application Deployment Simscape

Simulink Compiler Simscape Battery Code Generation Simscape Driveline AUTOSAR Blockset Simscape Electrical Simscape Fluids C2000 Microcontroller Blockset Simscape Multibody DDS Blockset Simulink 3D Animation Embedded Coder Stateflow Fixed-Point Designer

HDL Coder Real-Time Simulation and Testing HDL Verifier Simulink Desktop Real-Time Simulink Code Inspector

Simulink Real-Time Simulink Coder Simulink PLC Coder

Systems Engineering System Composer

Verification, Validation, and Test

MATLAB Test Polyspace Bug Finder Polyspace Code Prover Polyspace Test Requirements Toolbox Simulink Check Simulink Coverage Simulink Design Verifier

Simulink Fault Analyzer

Simulink Test

Reporting

MATLAB Coder

Simulink Report Generator

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Fixed-Point Designer

HDL Coder

HDL Verifier

Simulink Physical and Event-Based Modeling SimEvents

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#### **MATLAB** Online



#### **MATLAB Drive**





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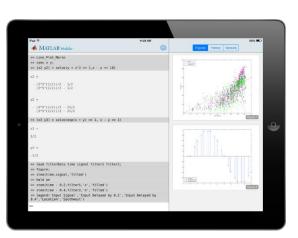
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MATLAB Mobile – acquire sensor data, integrated with online suite









Connect to MATLAB Mobile

**Acquire Sensor Data** 



Capture Images, Video, and Audio



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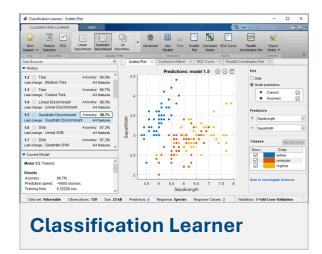
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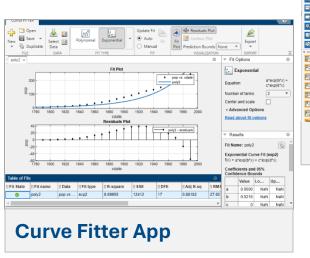
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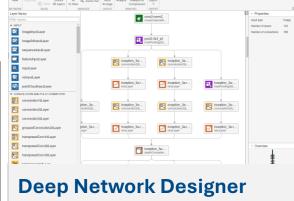
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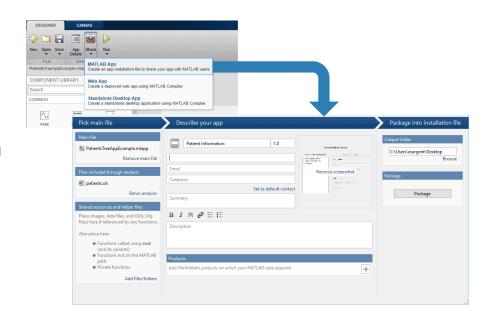
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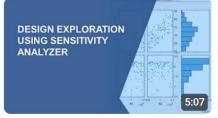
MATLAB YouTube Channel – thousands of hours of tutorials, webinars



5:50











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#### Find Answers, Learn and Share your Knowledge



### Open-source MATLAB code Publish yours to help others



#### Get the inside view on MATLAB and Simulink





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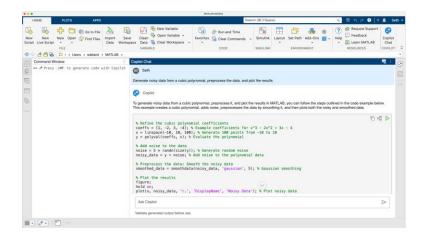
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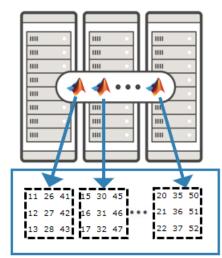
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**Student Support** – Competitions, student groups, tech support



**MATLAB Parallel Server** 







#### **MATLAB Grader**

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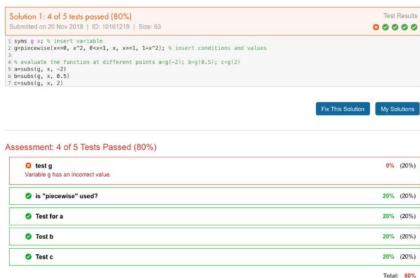
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**Teaching support** – Grader, Courseware, help with content creation, etc.



#### **Fourier Analysis**



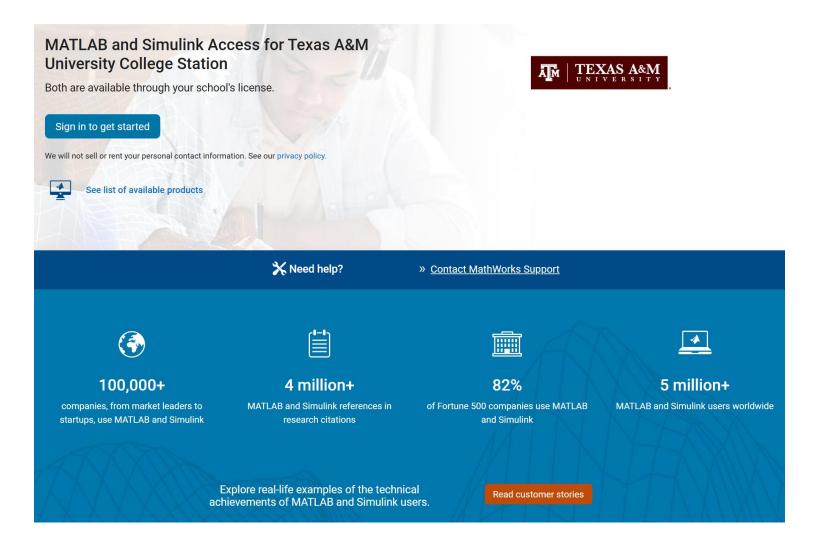
# Interactive Lectures

**Virtual Labs** 





#### Self-service Portal to Access MATLAB



mathworks.com/academia/tah-portal/texas-am-university-college-station-30976309.html



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