

List of MATLAB Tool boxes

Product	Product
<ul style="list-style-type: none"> • MATLAB • Simulink • Aerospace Blockset • Aerospace Toolbox • Antenna Toolbox • Audio System Toolbox • Automated Driving System Toolbox • Bioinformatics Toolbox • Communications System Toolbox • Computer Vision System Toolbox • Control System Toolbox • Curve Fitting Toolbox • DSP System Toolbox • Data Acquisition Toolbox • Database Toolbox • Datafeed Toolbox • Econometrics Toolbox • Embedded Coder • Filter Design HDL Coder • Financial Instruments Toolbox • Financial Toolbox • Fixed-Point Designer • Fuzzy Logic Toolbox • Global Optimization Toolbox • HDL Coder • HDL Verifier • Image Acquisition Toolbox • Image Processing Toolbox • Instrument Control Toolbox • LTE System Toolbox • MATLAB Coder • MATLAB Compiler • MATLAB Compiler SDK • MATLAB Report Generator • Mapping Toolbox • Model Predictive Control Toolbox • Model-Based Calibration Toolbox • Neural Network Toolbox • OPC Toolbox • Optimization Toolbox • Parallel Computing Toolbox 	<ul style="list-style-type: none"> • Partial Differential Equation Toolbox • Phased Array System Toolbox • Polyspace Bug Finder • Polyspace Code Prover • Powertrain Blockset • RF Blockset • RF Toolbox • Risk Management Toolbox • Robotics System Toolbox • Robust Control Toolbox • Signal Processing Toolbox • SimBiology • SimEvents • Simscape • Simscape Driveline • Simscape Electronics • Simscape Fluids • Simscape Multibody • Simscape Power Systems • Simulink 3D Animation • Simulink Code Inspector • Simulink Coder • Simulink Control Design • Simulink Design Optimization • Simulink Design Verifier • Simulink Desktop Real-Time • Simulink PLC Coder • Simulink Real-Time • Simulink Report Generator • Simulink Test • Simulink Verification and Validation • Spreadsheet Link • Stateflow • Statistics and Machine Learning Toolbox • Symbolic Math Toolbox • System Identification Toolbox • Trading Toolbox • Vehicle Network Toolbox • Vision HDL Toolbox • WLAN System Toolbox • Wavelet Toolbox

MATLAB Applications:

 Computational Biology Compute biological data with analysis, visualization, and modeling	 FPGA, ASIC, SoC Design Work with FPGA, ASIC, and SoC designs modeling, implementation, and verification	 Power Electronics Control Design Provide digital control for motors, power converters, and battery systems by designing and implementation
 Control Systems Control systems design, testing, and implementation	 Image Processing and Computer Vision Algorithm development and systems design for image and video processing- <ul style="list-style-type: none">• 3 D Image Processing• Video Processing• Embedded Vision	 Predictive Maintenance Development of condition monitoring and predictive maintenance software with deployment
 Data Science Improve designs and decisions by developing data-driven insights	 Internet of Things Get insight from the data by connecting your embedded devices to the internet	 Robotics Real world robotics solutions to build autonomous systems
 Deep Learning Designing, building, and visualization of neural networks	 Embedded Systems Design and build embedded systems by coding intuitively	 Signal Processing Simulate signal processing systems by modeling and designing of signals and time-series data
 Machine Learning Build predictive models by discovering new patterns	 Test and Measurement Explore data and automate tests	 Mechatronics Mechatronic systems design, development, and optimization
 Wireless Communications Wireless communications system designing and testing	 Mixed-Signal Systems Analog and mixed-signal systems designing and development	 Enterprise and IT Systems Deploy MATLAB code to enterprise IT Systems with security and maintainability

	Communications Development of industrial wireless communication systems		Energy Production Development of systems of energy production <ul style="list-style-type: none"> • Power and Utilities • Chemicals and Petrochemicals • Oil and Gas 		Software and Internet Development of algorithms for software and internet systems
	Earth, Ocean, and Atmospheric Sciences Working with complex geological systems		Metals, Materials, and Mining Working with sensor data to implement control strategies		Electronics Development of electronics systems and devices
	Biological Sciences Modeling and simulation of biological systems		Industrial Automation and Machinery Development of signal processing applications for industrial and energy-related equipment		Medical Devices Development of algorithms for medical devices
	Biotech and Pharmaceutical Data analysis for drug discovery, development, trials, and manufacturing		Aerospace and Defense Development of systems for aerospace and defenses		Semiconductors Design and development of semiconductors devices
	Quantitative Finance and Risk Management Development of algorithms for quantitative finance and risk management		Neuroscience Development, modeling, and simulation of models of brain circuits		Automotive Development of industry-specific automotive systems with required standards <ul style="list-style-type: none"> • Automated driving systems
	Railway Systems Development, modeling, simulation, and optimization of railway applications				