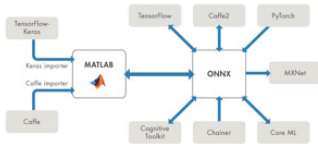


# MATLAB for Deep Learning Applications

MATLAB® makes it easy to design and build deep learning networks without having to be an expert.

## Why MATLAB for Deep Learning?



### Interoperability

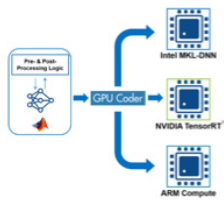
It's not an either/or choice between MATLAB and Python®-based frameworks. MATLAB supports interoperability with open-source deep learning frameworks using ONNX™ import and export capabilities.



### Apps for Design and Preprocessing

**Get to network training quickly.** Preprocess datasets with apps for audio, video, and image data. Design network architectures or modify pretrained networks for transfer learning.

*Deep Network Designer App*



### Multi-Platform Deployment

**Deploy deep learning models anywhere.** Target cloud, enterprise, and embedded systems with CUDA® and C-code generation.

### Acceleration

Scale to multiple NVIDIA® GPUs with DGX™ Systems in data centers or in the cloud.

## Deep Learning for Your Application Space



Controls



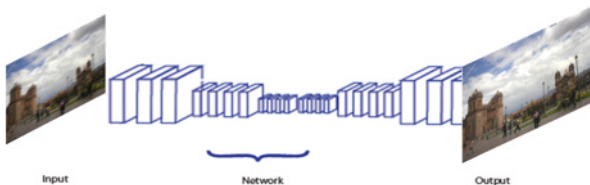
Signal and Audio



Computer Vision and Image Processing

Learn about the newest capabilities in MATLAB, including deep learning for audio, text, and time-series data:

[mathworks.com/solutions/deep-learning.html](http://mathworks.com/solutions/deep-learning.html)



## New to Deep Learning?

Deep Learning Onramp is a free self-paced course introducing deep learning through hands-on exercises and short videos. Learn how to apply deep learning methods to perform image recognition using MATLAB.

This course is available online without a MATLAB license.



Explore how MATLAB can augment your deep learning work.

### Deep Learning Toolbox™

Create, train, and simulate shallow and deep learning neural networks.

### Reinforcement Learning Toolbox™

Develop controllers and decision-making systems using deep learning.

### Automated Driving Toolbox™

Design, simulate, and test ADAS and autonomous driving systems.

### GPU Coder™

Generate CUDA code for NVIDIA GPUs.