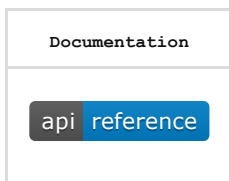




python 3.7 | 3.8 | 3.9 | 3.10 pypi package 2.9.2 DOI 10.5281/zenodo.4724125



[TensorFlow](#) is an end-to-end open source platform for machine learning. It has a comprehensive, flexible ecosystem of [tools](#), [libraries](#), and [community](#) resources that lets researchers push the state-of-the-art in ML and developers easily build and deploy ML-powered applications.

TensorFlow was originally developed by researchers and engineers working on the Google Brain team within Google's Machine Intelligence Research organization to conduct machine learning and deep neural networks research. The system is general enough to be applicable in a wide variety of other domains, as well.

TensorFlow provides stable [Python](#) and [C++](#) APIs, as well as non-guaranteed backward compatible API for [other languages](#).

Keep up-to-date with release announcements and security updates by subscribing to [announce@tensorflow.org](mailto:announce@tensorflow.org). See all the [mailing lists](#).

## Install

See the [TensorFlow install guide](#) for the [pip package](#), to [enable GPU support](#), use a [Docker container](#), and [build from source](#).

To install the current release, which includes support for [CUDA-enabled GPU cards](#) (*Ubuntu and Windows*):

```
$ pip install tensorflow
```

A smaller CPU-only package is also available:

```
$ pip install tensorflow-cpu
```

To update TensorFlow to the latest version, add `--upgrade` flag to the above commands.

Nightly binaries are available for testing using the [tf-nightly](#) and [tf-nightly-cpu](#) packages on PyPi.

### Try your first TensorFlow program

```
$ python
```

```
>>> import tensorflow as tf
>>> tf.add(1, 2).numpy()
3
>>> hello = tf.constant('Hello, TensorFlow!')
>>> hello.numpy()
b'Hello, TensorFlow!'
```

For more examples, see the [TensorFlow tutorials](#).

## Contribution guidelines

If you want to contribute to TensorFlow, be sure to review the [contribution guidelines](#). This project adheres to TensorFlow's [code of conduct](#). By participating, you are expected to uphold this code.

We use [GitHub issues](#) for tracking requests and bugs, please see [TensorFlow Discuss](#) for general questions and discussion, and please direct specific questions to [Stack Overflow](#).

The TensorFlow project strives to abide by generally accepted best practices in open-source software development:

oss-fuzz coverage failing openssf best practices passing Contributor Covenant v1.4 adopted

## Continuous build status

You can find more community-supported platforms and configurations in the [TensorFlow SIG Build community builds table](#).

### Official Builds

Build Type	Status	Artifacts
Linux CPU	Ubuntu CC passing	<a href="#">PyPI</a>
Linux GPU	Ubuntu GPU PY3 passing	<a href="#">PyPI</a>
Linux XLA	Ubuntu XLA failing	TBA
macOS	MacOS PY2 CC passing	<a href="#">PyPI</a>
Windows CPU		<a href="#">PyPI</a>

	Windows CPU <span>passing</span>	
<b>Windows GPU</b>	Windows GPU <span>failing</span>	<a href="#">PyPI</a>
<b>Android</b>	Android <span>passing</span>	<a href="#">Download</a>
<b>Raspberry Pi 0 and 1</b>	Rpi01 py3 <span>failing</span>	<a href="#">Py3</a>
<b>Raspberry Pi 2 and 3</b>	Rpi23 py3 <span>failing</span>	<a href="#">Py3</a>
<b>Libtensorflow MacOS CPU</b>	Status Temporarily Unavailable	<a href="#">Nightly Binary</a> , <a href="#">Official GCS</a>
<b>Libtensorflow Linux CPU</b>	Status Temporarily Unavailable	<a href="#">Nightly Binary</a> , <a href="#">Official GCS</a>
<b>Libtensorflow Linux GPU</b>	Status Temporarily Unavailable	<a href="#">Nightly Binary</a> , <a href="#">Official GCS</a>
<b>Libtensorflow Windows CPU</b>	Status Temporarily Unavailable	<a href="#">Nightly Binary</a> , <a href="#">Official GCS</a>
<b>Libtensorflow Windows GPU</b>	Status Temporarily Unavailable	<a href="#">Nightly Binary</a> , <a href="#">Official GCS</a>

## Resources

- [TensorFlow.org](#)
- [TensorFlow Tutorials](#)
- [TensorFlow Official Models](#)
- [TensorFlow Examples](#)
- [DeepLearning.AI TensorFlow Developer Professional Certificate](#)
- [TensorFlow: Data and Deployment from Coursera](#)
- [Getting Started with TensorFlow 2 from Coursera](#)
- [TensorFlow: Advanced Techniques from Coursera](#)
- [TensorFlow 2 for Deep Learning Specialization from Coursera](#)
- [Intro to TensorFlow for A.I, M.L, and D.L from Coursera](#)
- [Intro to TensorFlow for Deep Learning from Udacity](#)
- [Introduction to TensorFlow Lite from Udacity](#)
- [Machine Learning with TensorFlow on GCP](#)
- [TensorFlow Codelabs](#)
- [TensorFlow Blog](#)
- [Learn ML with TensorFlow](#)
- [TensorFlow Twitter](#)
- [TensorFlow YouTube](#)
- [TensorFlow model optimization roadmap](#)
- [TensorFlow White Papers](#)
- [TensorBoard Visualization Toolkit](#)

Learn more about the [TensorFlow community](#) and how to [contribute](#).

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