

[Cloud AutoML Vision Object Detection](#)

# AutoML Vision Edge terminology

Term	Description
<a href="https://developer.android.com/studio">Android Studio</a> ( <a href="https://developer.android.com/studio">https://developer.android.com/studio</a> )	The official integrated development environment for Android development.
<a href="https://cocoapods.org/">CocoaPods</a> ( <a href="https://cocoapods.org/">https://cocoapods.org/</a> )	A dependency manager used here for Android and Objective-C Cocoa projects to manage and manage external libraries.
<a href="https://www.google.com/url?q=https://developer.apple.com/documentation/coreml">Core ML</a> ( <a href="https://www.google.com/url?q=https://developer.apple.com/documentation/coreml">https://www.google.com/url?q=https://developer.apple.com/documentation/coreml</a> )	A machine learning framework used in iOS and macOS. Models can be converted to CoreML format.
<a href="https://www.google.com/url?q=https://www.docker.com/resources/what-container">Container ("export to Docker/container")</a> ( <a href="https://www.google.com/url?q=https://www.docker.com/resources/what-container">https://www.google.com/url?q=https://www.docker.com/resources/what-container</a> )	The runtime instance of an image; on the edge device, the model using AutoML Vision Edge.
Edge devices	A device that provides compute capabilities. Constraints like privacy/confidentiality, low power, and low cost drive demand for predictive devices. Compute and power constraints drive demand for them.
<a href="https://www.google.com/url?q=https://cloud.google.com/edge-tpu/">Edge TPU</a> ( <a href="https://www.google.com/url?q=https://cloud.google.com/edge-tpu/">https://www.google.com/url?q=https://cloud.google.com/edge-tpu/</a> )	A type of Edge device; Google's purpose-built integrated circuit (ASIC) designed to run TensorFlow Lite models. Supports <code>.tflite</code> models only.
<a href="https://firebase.google.com/">Firebase</a> ( <a href="https://firebase.google.com/">https://firebase.google.com/</a> )	A mobile and web application development platform.
<a href="https://www.google.com/url?q=https://google.github.io/flatbuffers/">FlatBuffers</a> ( <a href="https://www.google.com/url?q=https://google.github.io/flatbuffers/">https://www.google.com/url?q=https://google.github.io/flatbuffers/</a> )	Similar to Protocol buffers, with the performance benefits of FlatBuffers do not need a parsing/serialization step before you can access object memory allocation.
( <a href="https://www.google.com/url?q=https://cloud.google.com/solutions/iot-overview">https://www.google.com/url?q=https://cloud.google.com/solutions/iot-overview</a> ) IoT	Internet of Things (IoT); the use of networked devices embedded in the physical environment to enable a new scenario or process.
<a href="https://developers.google.com/ml-kit/">ML Kit</a> ( <a href="https://developers.google.com/ml-kit/">https://developers.google.com/ml-kit/</a> )	ML Kit acts as an API layer to your current development kit (SDK) that allows you to use machine learning on your device.

Term	Description
<u>Pillow</u> ( <a href="https://pillow.readthedocs.io/en/stable/handbook/overview.html">https://pillow.readthedocs.io/en/stable/handbook/overview.html</a> )	The Python Imaging Library (PIL) added to your Python interpreter; Pillow is a
<u>Protocol buffers ("protobuf")</u> ( <a href="https://github.com/protocolbuffers/protobuf#protocol-buffers---googles-data-interchange-format">https://github.com/protocolbuffers/protobuf#protocol-buffers---googles-data-interchange-format</a> )	Google's language-neutral, platform-neutral serializing structured data. Similar to
<u>TensorFlow</u> ( <a href="https://www.tensorflow.org/">https://www.tensorflow.org/</a> )	TensorFlow is an end-to-end open source learning; software used to create a m
<u>TensorFlow lite model (TF Lite/<a href="https://www.tensorflow.org/lite">model.tflite</a>)</u> ( <a href="https://www.tensorflow.org/lite">https://www.tensorflow.org/lite</a> )	A TensorFlow ML model that has been and embedded devices. <ul style="list-style-type: none"> <li>• <u>TF Lite converter</u> (<a href="https://www.tensorflow.org/lite/guide/convert">https://www.tensorflow.org/lite/guide/convert</a>) - TensorFlow Lite uses the optimized graphs. Therefore, a TensorFlow model can be converted into a FlatBuffer file</li> <li>• <u>TF Lite interpreter</u> (<a href="https://www.tensorflow.org/api_guides/python/tf.lite.Interpreter">https://www.tensorflow.org/api_guides/python/tf.lite.Interpreter</a>) - A class that does the job of a tf.nn.Module object for TensorFlow Lite models as opposed to regular TensorFlow models</li> </ul>
<u>tf.Session()</u> ( <a href="https://www.tensorflow.org/api_docs/python/tf/Session">https://www.tensorflow.org/api_docs/python/tf/Session</a> )	A class for running TensorFlow operations
<u>Xcode</u> ( <a href="https://developer.apple.com/xcode/">https://developer.apple.com/xcode/</a> )	Xcode is an integrated development environment containing a suite of software development tools for developing software for macOS, iOS,

Except as otherwise noted, the content of this page is licensed under the [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/) (<https://creativecommons.org/licenses/by/4.0/>), and code samples are licensed under the [Apache 2.0 License](https://www.apache.org/licenses/LICENSE-2.0) (<https://www.apache.org/licenses/LICENSE-2.0>). For details, see our [Site Policies](https://developers.google.com/terms/site-policies) (<https://developers.google.com/terms/site-policies>). Java is a registered trademark of Oracle and/or its affiliates.

Last updated August 29, 2019.