**OpenPose Plugin for Unity**

**Operating Systems:**

* Windows 7, 8, 10

**Prerequisites**

1. If you plan to use the default OpenPose DLL (recommended):
   1. Make sure that the [latest OpenPose portable demo](<https://github.com/CMU-Perceptual-Computing-Lab/openpose/releases>) works properly by running the default examples following <https://github.com/CMU-Perceptual-Computing-Lab/openpose/blob/master/doc/quick_start.md#quick-start>
2. If you also plan to compile and install the OpenPose C++ library on the same machine (e.g., if you plan to use the latest GitHub version rather than the latest official release or if you intend to modify the OpenPose C++ library):
   1. Install the OpenPose prerequisites from <https://github.com/CMU-Perceptual-Computing-Lab/openpose/blob/master/doc/installation.md#prerequisites>
   2. Install OpenPose following <https://github.com/CMU-Perceptual-Computing-Lab/openpose/blob/master/doc/installation.md>
   3. Make sure that OpenPose works properly by running the default examples following <https://github.com/CMU-Perceptual-Computing-Lab/openpose/blob/master/doc/quick_start.md#quick-start>
   4. Note: Only Visual Studio 2015 Enterprise Update 3, CUDA 8, and cuDNN 5.1 are officially supported and tested for the Unity project. VS versions different to 2015 or CUDA versions different to 8 are not officially supported. They might or might not get support in the future. In order to use a different version, just make sure you can run the OpenPose examples with that software. Unity installs by default VS Community 2017. If you installed already VS 2017 and you desire to use OpenPose with VS 2015 Enterprise Update 3, you have to:
      1. Uninstall VS 2015 and 2017.
      2. Install the OpenPose prerequisites (VS 2015, CUDA 8, cuDNN 5.1). Not uninstalling VS 2015 after uninstalling VS 2017 might lead to really cryptic bugs in VS 2015 when compiling OpenPose.
      3. Install OpenPose following steps 2 and 3.
   5. Install Unity without VS Community 2017 (so Unity will automatically use the same existing VS version than OpenPose uses). Tested and officially supported only for Unity versions higher or equal than 2018.2.9f1.

**Running the Unity demo that uses the OpenPose Unity Plugin:**

1. Download and unzip the OpenPosePlugin folder somewhere in your local machine.
2. Go to OpenPosePlugin\Assets\OpenPose\Examples\Scenes, and open “Output2D.unity”, you should see Unity is started and codes are compiling.
3. After Unity is successfully started, run it.

**Extra information:**

* See OpenPosePluginForUnity\_UML.pdf or OpenPosePluginForUnity\_UML.mdj (StarUML editable file) for a very basic UML description of this Unity project.

**Reporting bugs or issues:**

Create a new GitHub issue in the OpenPose repository at <https://github.com/CMU-Perceptual-Computing-Lab/openpose/issues> and fill all the “Your System Configuration” information.