# Unity Sentis - Getting Started

Overview

Sentis is an experimental feature in Unity that allows users to import trained neural network models into Unity. This allows users to benefit from machine learning features working inside Unity without having to hard code it from scratch. Functionality in games like smarter bot AI and analyzing data that a player draws by hand has never been easier. Sentis is currently in open beta, but the latest version (1.4.0) is available with all compatible Unity versions (2023.2 or later) via the package manager.

Adding Sentis to Your Unity Project

With the Unity project you want to add Sentis to open, follow these steps:
1. Open the Package Manager (*Window > Package Manager*)
2. Click the + in the top left corner and select *Install package by name...*
3. Enter *com.unity.sentis*
4. Click *Add*
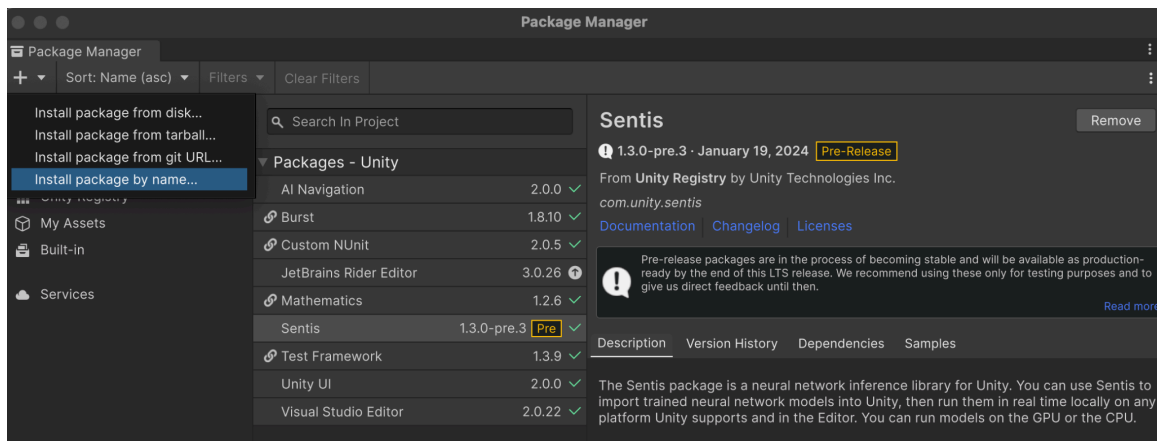
Getting Sentis Up And Running

1. Use the Unity.Sentis namespace by adding *using Unity.Sentis;* to the top of your script
2. Load a neural network model:
    - Sentis recognizes neural network models using the ONNX format. To load a model into Unity, export it as an ONNX file from a machine learning framework (PyTorch, TensorFlow, Keras, Model Zoo, etc.)
    - Add the file to the Assets folder of your project
    - Create a runtime model in your script with the following code:

```
ModelAsset modelAsset = Resources.Load("model-file-in-assets-folder") as ModelAsset;
runtimeModel = ModelLoader.Load(modelAsset);
```

3. Create the input data for the model to use, in the form of a tensor. Arrays or textures can be converted to a tensor.
4. Create an inference engine, also referred to as a "worker". A worker breaks down the model into executable tasks.
5. Run the model using the Execute() method
6. Use a method like PeekOutput() to get the output data from the model

Reference the [Sentis Documentation](#) for more information.