

# Licence and credits

## Credits

ESPNEAT builds heavily on InteractiveNEAT. This code adds a lot of new features that allow mixed-initiative creation of neural networks based on modules.

InteractiveNEAT is an expansion of UnityNEAT that includes interactive selection of individuals during evolution (as well as automatic fitness-based selection as in the standard version of UnityNEAT).

ESPNEAT has been created by [Pablo González de Prado Salas](#), during his postdoc with **Sebastian Risi** at the IT University of Copenhagen.

The scripts that I have modified are classified in subfolders named “EspNeat” for clarity. I have also worked on the Cars scene example and added some more scenes of my own.

UnityNEAT was created by **Daniel Jallof**. SharpNEAT’s main contributor is [Colin Green](#).

## Licence

### Credits and original licence notice as taken from the original UnityNEAT:

ESPNEAT is an extension of UnityNeat created by Pablo González de Prado Salas during his postdoc with Sebastian Risi at the IT University of Copenhagen. ESPNEAT allows creating modular neural networks, as in Dan Lessin et al., GECCO 2013 (doi: 10.1145/2463372.2463411). It also introduces interactive evolution and more control (mixed-initiative design) over the modules, their inputs and outputs, and their regulation.

UnityNEAT is a port of SharpNEAT from pure C# 4.0 to Unity 4.x and 5 (using Mono 2.6), and is integrated to work with Unity scenes for evaluation. UnityNEAT is created by Daniel Jallof as part of his master's thesis at the Center for Computer Games Research at the IT University in Copenhagen.

All the NEAT code is pure SharpNEAT, but is running in a single thread through Coroutines instead of using Parallel. For as in regular SharpNEAT.

This project is released under the same license as SharpNEAT: <http://sharpneat.sourceforge.net/licensing.htm> which is the MIT License, changed from GNU General Public License, minimum version 3 in a previous version.

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## Icon credits

Where not specified, icons used in this project are the personal work of Pablo González de Prado Salas. They may be reused, but it is necessary to credit the author.

Normal buttons were inspired (but independently drawn) by the built-in icons in Unity.

From [www.flaticon.com](http://www.flaticon.com):

- The computer screen icon (not its contents) was copied (not downloaded) from the work [by Situ Herrera](#).
- Stop icon is a variation from [Freepik's](#).
- Play-best icon is a variation on [Freepik's](#).
- Hand within the screen in the manual-mode icon from [Freepik's](#).
- Back icon from [Stephen Hutchings](#).
- Feather in weights icon [by Franco Averta](#).