

CIO NN

CIO NN stands for **C**ontroller **I**nter **O**utput **N**erual **N**etwork

note due to a typo the "**neuron**" means "**neron**"

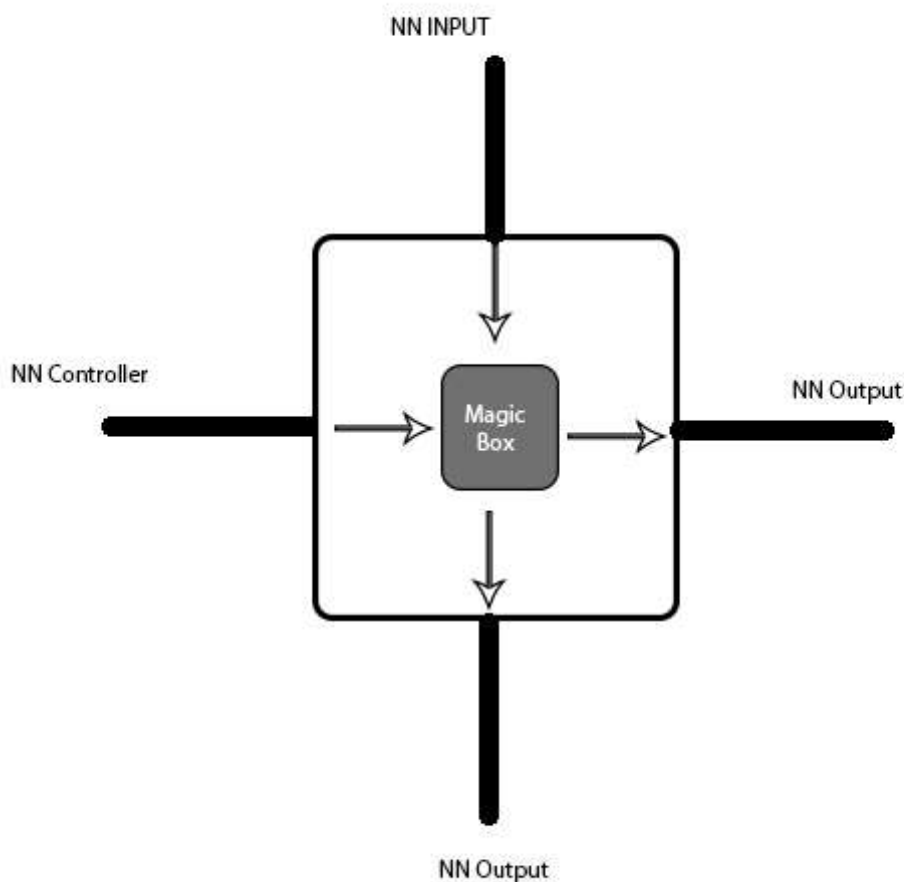
For this we have to redefine the Neron

- 2 Inputs
- 2 Outputs
- 4 Weights (each input and output have their own weights)
- Internal Memory Cell (any byte or bit or block size with variable size)
- Activation Function (Defines what weights and what inputs activate this Neron)
- Memory Storage Function (Defines what and when this cell should store said memory or memory stream)
- Memory Transpose Function (Once activated any stored memory that the activation function can trigger will be played/pushed into the Nerual Network)
- Forget Function (Defines when and/or how and/or why these memories can be destroyed/removed based on Activation function with Memory states and any input stateses itself)

How would I implement this in the form of Code? please take note of the spec. (this is non profit/GNU v3)

This would look something like these:

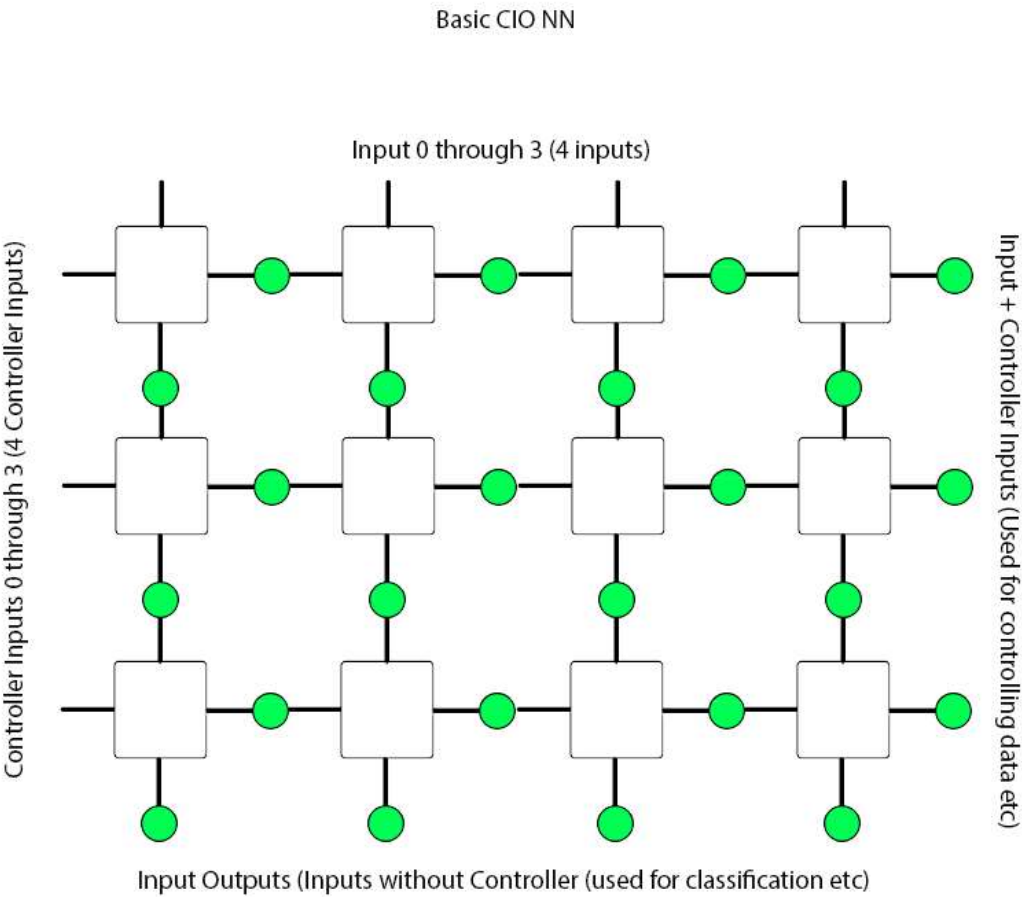
Basic CIO NN Neron



<https://keybase.io/DeanVanGreunen>

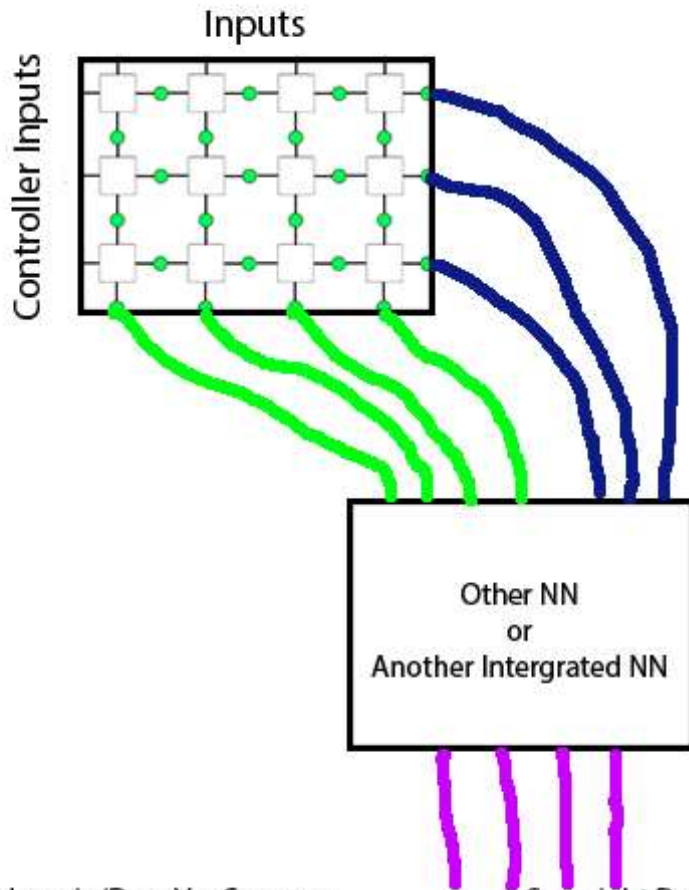
copyright Dean Van Greunen

These would be arranges like this:



Which we can build it into this:

Connectig with the Basic CIO NN



<http://keybase.io/DeanVanGreunen>

Copyright Dean Van Greunen

it can be trained like this:

- do normal NN training from the inputs to the input outputs like a hidden layer NN

then trained to be controlled like this:

- then set the known NN dataset (inputs) to be corrected to actual or correct values via the CI (Controller Input) which will be outputed on the "Input + Controller Input" Output

by training like this:

- you have a normal NN with hidden layers which can be trained (this can be done with CNNs) with backpropergation, and a cost function (use least amount of nerons) etc
- now you can allow the CIO NN to retrain / teach itself with supervised or unsupervised learning.
- you can combine the "Input Output" and the "Input + Controller Input" Output with another NN which can then connect with this NN in a similiar way that a Neron connects to a Neron