Edge

- -gradient_: double = 0
- -old_gradient_: double = 0
- -weight : double = 0
- +PassActivation(): void
- +PassDelta(): void
- +gradient(): double
- +set gradient(value)
- +old_gradient(): double
- +set_old_gradient(value)
- +weight()
- +set weight(value)

2

0..3

Node

- -activ_function_
- -activ_function diff
- -pre activation : double = 0
- -activation_: double = 0
- -pre delta : double = 0
- -delta_: double = 0
- +PassActivations()
- +UpdateDelta()
- +UpdateActivation()
- +PassDeltas()
- +out weights(): double*
- +in weights(): double*
- +activ_function()
- +set activ function(value): void
- +activ function diff()
- +set activ function diff(value): void
- +pre_activation(): double
- +set_pre_activation(value): void
- +activation(): double
- +set activation(value): void
- +pre delta(): double
- +set pre delta(value): void
- +delta(): double
- +set_delta(value): void

NeuralNet

- -learning_rate_: double = 1
 -momentum : double = 0
- +NeuralNet(layer sizes)
- +NeuralNet(filename)
- +outputs(): double*
- +UpdateActivations(inputs)
- +UpdateGradients(outputs)
- +Export(filename): void
- +momentum(): double
- +set_momentum(value): void
- +learning rate(): double
- +set learning rate(value): void

0..* 1

Layer

+Layer(int)

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