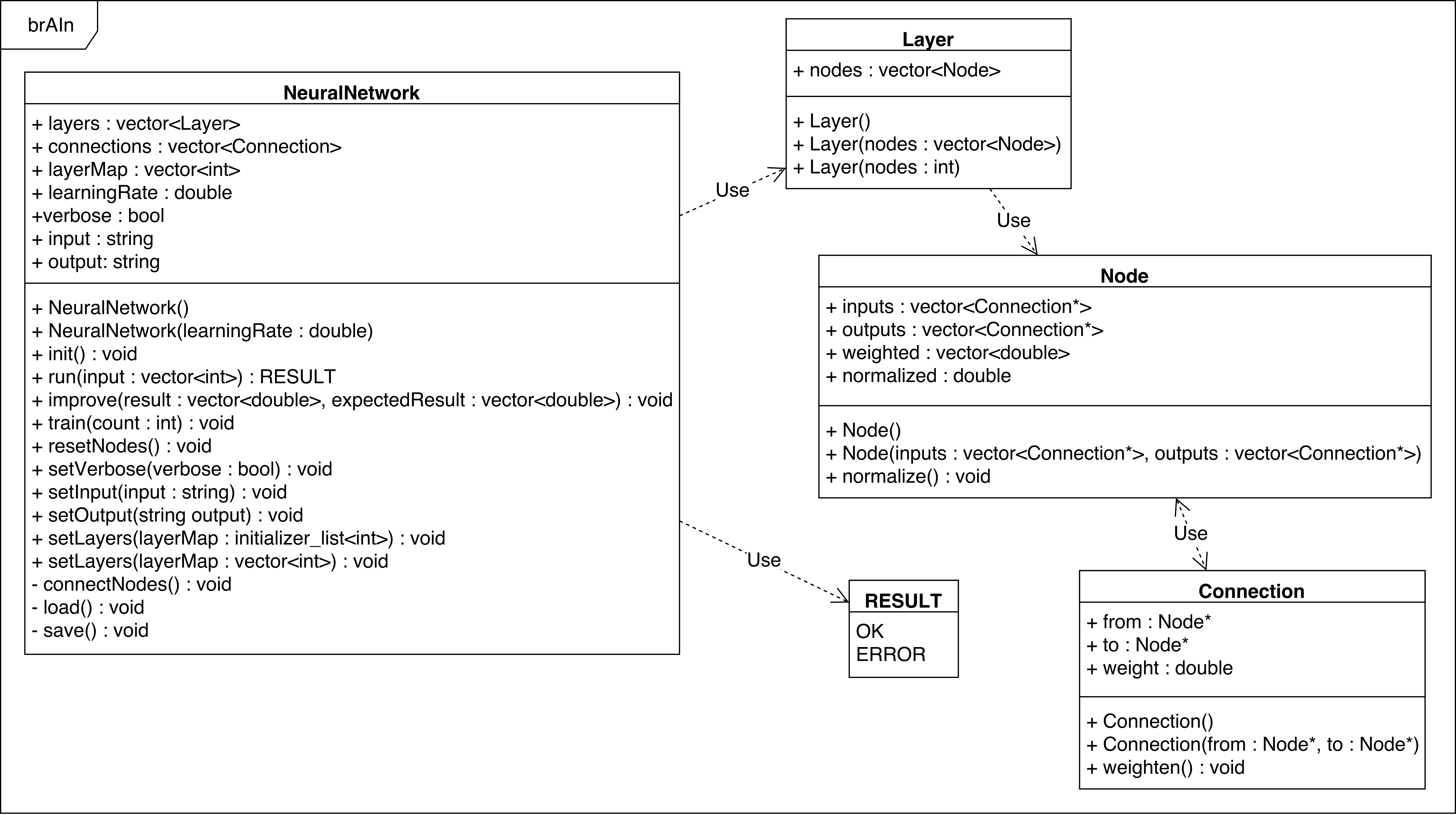

NeuralNetwork

```
+ layers : vector<Layer>
+ connections : vector<Connection>
+ layerMap : vector<int>
+ learningRate : double
+verbose : bool
+ input : string
+ output: string

+ NeuralNetwork()
+ NeuralNetwork(learningRate : double)
+ init() : void
+ run(input : vector<int>) : RESULT
+ improve(result : vector<double>, expectedResult : vector<double>) : void
+ train(count : int) : void
+ resetNodes() : void
+ setVerbose(verbose : bool) : void
+ setInput(input : string) : void
+ setOutput(string output) : void
+ setLayers(layerMap : initializer_list<int>) : void
+ setLayers(layerMap : vector<int>) : void
- connectNodes() : void
- load() : void
- save() : void
```

Layer

```
+ nodes : vector<Node>

+ Layer()
+ Layer(nodes : vector<Node>)
+ Layer(nodes : int)
```

Node

```
+ inputs : vector<Connection*>
+ outputs : vector<Connection*>
+ weighted : vector<double>
+ normalized : double

+ Node()
+ Node(inputs : vector<Connection*>, outputs : vector<Connection*>)
+ normalize() : void
```

RESULT

```
OK
ERROR
```

Connection

```
+ from : Node*
+ to : Node*
+ weight : double

+ Connection()
+ Connection(from : Node*, to : Node*)
+ weighten() : void
```