Neural Network Model

Hongming Wang
ID:20667749

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Attached files named `trainedFNN\_1` and `trainedFNN\_2` are generated by *Encog* during the training and contain complete information to construct the models. This document is a readable illustration of final models for NN_1 and NN_2.
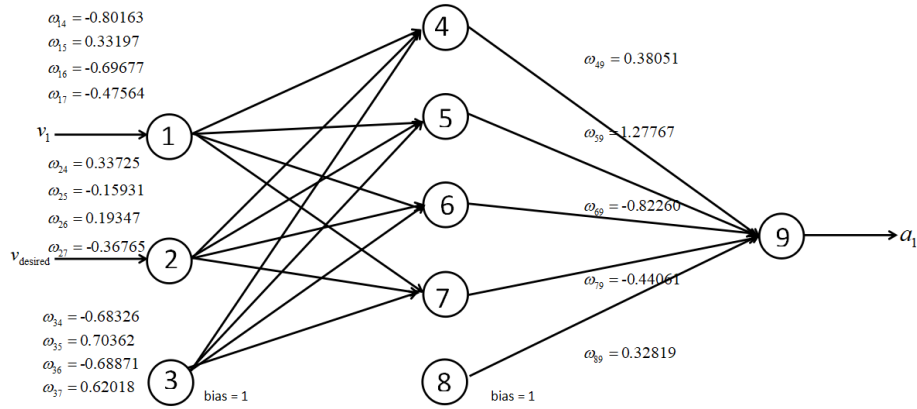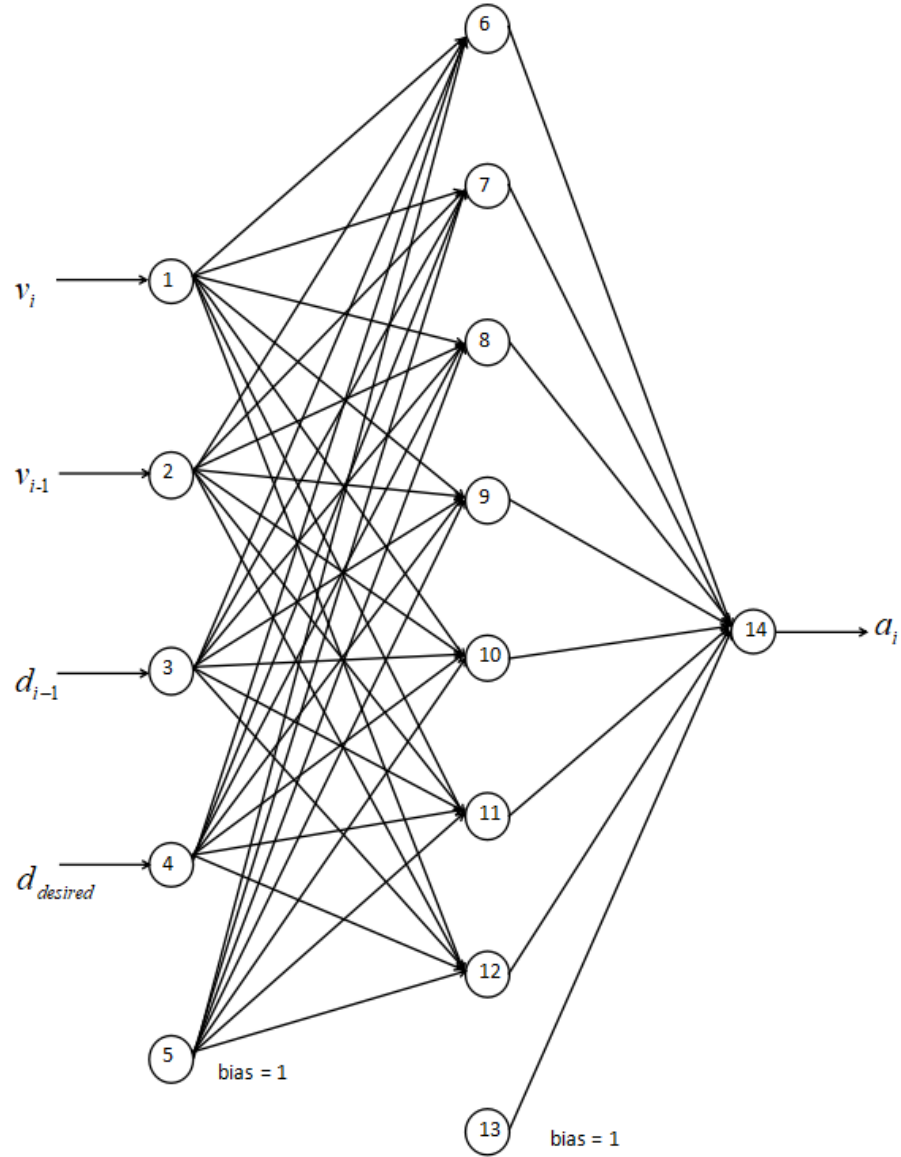

Figure 1: Final FNN model with tuned weights for NN_1.

Figure 2: Final FNN model for NN$_2$.

Weights for NN$_2$ are given by:

$w_{1\,6} = 0.7454926058; w_{1\,7} = 1.1858531925; w_{1\,8} = -0.4797801724; w_{1\,9} = 0.2716885362;$

$w_{1\,10} = 0.4531104079; w_{1\,11} = 0.4470886188; w_{1\,12} = 0.384193595;$

$w_{2\,6} = 0.8192411301; w_{2\,7} = -0.0438224308; w_{2\,8} = -0.3150974201; w_{2\,9} = 0.3979979529;$

$w_{2\,10} = -0.2273888523; w_{2\,11} = 0.7468065226; w_{2\,12} = -0.4244182797;$

$w_{3\,6} = -0.7654839454; w_{3\,7} = -0.6986793964; w_{3\,8} = 0.055124145; w_{3\,9} = 0.9102389945;$

$w_{3\,10} = 0.037653205; w_{3\,11} = 0.1199159864; w_{3\,12} = -0.1779653432;$

$w_{4\,6} = 0.8670708921; w_{4\,7} = -0.9101399751; w_{4\,8} = 0.4331809077; w_{4\,9} = 0.2934353697;$

$w_{4\,10} = 2.4663187715; w_{4\,11} = -1.9335004179; w_{4\,12} = 4.6901224433;$

$w_{5\,6} = -0.9492870757; w_{5\,7} = 0.3531919166; w_{5\,8} = 16.4028950243; w_{5\,9} = -13.501138703;$

$w_{5\,10} = 0.1376240377; w_{5\,11} = 0.0447839549; w_{5\,12} = -2.7983998386;$

$w_{6\,14} = 0.2852897441; w_{7\,14} = 0.5812536309; w_{8\,14} = 0.6559493296; w_{9\,14} = 0.8195038026;$

$w_{10\,14} = -0.5762521214; w_{11\,14} = -0.5444107639; w_{12\,14} = -0.5075815425; w_{13\,14} = 0.5803182087;$