HW3

163012
Try different structures on NN-based controller (different number of neurons and/or hidden layers). Compare the control time.
“Different set points and step times were used. ”???
Step time is defined by the given system. It is td=1.

166979
“it can be concluded that decreasing the number of hidden layers from 25 to 2...”
25 hidden layers? I didn’t see a structure with 25 hidden layers in the report.

165588
How control time was measured? Control time cannot be 1 sample.

177838
How control time was measured?

156352
Try different structures on NN-based controller (different number of neurons and/or hidden layers). Compare the control time.
ow control time can be measured?

177258
How control time was measured?

165547
Figure 6 - control doesn’t work correctly
+-0.05 is not on the figure - not possible to measure control time.

177948
How control time was measured?

177940
The required accuracy of control is ±0.05. It is not on the figure. Control time cannot be measured.

165573
The required accuracy of control is ±0.05. It is not presented on the figure. Thus, control time cannot be measured.

165579
“I am using 3 inputs , 25 hidden layers and one output ”, “Here i was using 5

hidden layers “ - there is only 1 hidden layer with 25 or 5 neurons.
Define control time (settling time) of the closed loop system.
Compare the control time.

177951
Define control time (settling time) of the closed loop system.

165587
Define control time (settling time) of the closed loop system.
Try different structures on NN-based controller (different number of neurons and/or hidden layers). Compare the control time.

The required accuracy of control is ±0.05. It is not presented on the figure.
Thus, control time cannot be measured.

156359
Define control time (settling time) of the closed loop system.
Compare the control time.
The required accuracy of control is ±0.05. It is not presented on the figure.
Thus, control time cannot be measured.

172954
“Figure 2: Simulink model for j_CSTR_data “???

163494
In nonadaptive case, the system doesn’t work correctly.
Define control time (settling time) of the closed loop system.

165581
A black box nonlinear system is given in the file nonlinear_system.slx.
All the experiments in the report are made with Jacketed CSTR system that we used in the lab.

165575
Design Neural Network based nonadaptive and adaptive control systems for the given nonlinear system.
Test the system with set points 0.7. The required accuracy of control is ±0.05.
Define control time (settling time) of the closed loop system.
Try different structures on NN-based controller (different number of neurons and/or hidden layers). Compare the control time.

177822
No explanations or comments between figures. Just, a set of different simulation results.

177944
Try different structures on NN-based controller (different number of neurons and/or hidden layers). Compare the control time.

165596
Define control setting time (settling time) of the closed loop system.
Try different stractures on NN-based controller (different number of neurons and/or hidden layers). Compare the control time.

178177
Define control time (settling time) of the closed loop system.
Try different structures on NN-based controller (different number of neurons and/or hidden layers). Compare the control time.
Figure 3 - nonadaptive system doesn’t work correctly even without disturbances.

165584
Just a set of screenshots

177943
page 3 - nonadaptive system doesn’t work correctly even without disturbances.

172626
A black box nonlinear system is given in the file nonlinear_system.slx.
All the experiments in the report are made with Jacketed CSTR system that we used in the lab.
Some figures do not correspond to schemes. Set point in the home task is 0.7, not 0.8 either 0.3.

163216
Give nonlinear system was used to generate data and train controller, but it was applied to another system. Controller was designed for one system, but applied to another!?
Wrong set point, no analysis of structure either control time.