Hellenic Complex Systems Laboratory

# Intelligent Quality: A Software Tool for Exploring the Application of Convolutional Neural Networks to Quality Control Samples of Very Small Size

Technical Report XXII

Supplement

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# The trained convolutional neural networks as Wolfram Language objects

The files of the trained convolutional neural networks (CNN) as Wolfram Language objects

| CNN | Wolfram Language Objects | | |
|---|---|---|---|
| | Name | Files | |
| $N_{14}(x_1)$ | “ncl1” | /WLO/NN1/ncl1/object.wl | /WLO/NN1/ncl1/put.wl |
| $N_1(x_1, x_2)$ | “ncl2” | /WLO/NN1/ncl2/object.wl | /WLO/NN1/ncl2/put.wl |
| $N_1(x_1, x_2, x_3)$ | “ncl3” | /WLO/NN1/ncl3/object.wl | /WLO/NN1/ncl3/put.wl |
| $N_1(x_1, x_2, x_3, x_4)$ | “ncl4” | /WLO/NN1/ncl4/object.wl | /WLO/NN1/ncl4/put.wl |
| $N_2(x_1)$ | “ncl1” | /WLO/NN2/ncl1/object.wl | /WLO/NN2/ncl1/put.wl |
| $N_2(x_1, x_2)$ | “ncl2” | /WLO/NN2/ncl2/object.wl | /WLO/NN2/ncl2/put.wl |
| $N_2(x_1, x_2, x_3)$ | “ncl3” | /WLO/NN2/ncl3/object.wl | /WLO/NN2/ncl3/put.wl |
| $N_2(x_1, x_2, x_3, x_4)$ | “ncl4” | /WLO/NN2/ncl4/object.wl | /WLO/NN2/ncl4/put.wl |
| $N_3(x_1)$ | “ncl1” | /WLO/NN3/ncl1/object.wl | /WLO/NN3/ncl1/put.wl |
| $N_3(x_1, x_2)$ | “ncl2” | /WLO/NN3/ncl2/object.wl | /WLO/NN3/ncl2/put.wl |
| $N_3(x_1, x_2, x_3)$ | “ncl3” | /WLO/NN3/ncl3/object.wl | /WLO/NN3/ncl3/put.wl |
| $N_3(x_1, x_2, x_3, x_4)$ | “ncl4” | /WLO/NN3/ncl4/object.wl | /WLO/NN3/ncl4/put.wl |
| $N_4(x_1)$ | “ncl1” | /WLO/NN4/ncl1/object.wl | /WLO/NN4/ncl1/put.wl |
| $N_4(x_1, x_2)$ | “ncl2” | /WLO/NN4/ncl2/object.wl | /WLO/NN4/ncl2/put.wl |
| $N_4(x_1, x_2, x_3)$ | “ncl3” | /WLO/NN4/ncl3/object.wl | /WLO/NN4/ncl3/put.wl |
| $N_4(x_1, x_2, x_3, x_4)$ | “ncl4” | /WLO/NN4/ncl4/object.wl | /WLO/NN4/ncl4/put.wl |
| $N_6(x_1)$ | “ncl1” | /WLO/NN6/ncl1/object.wl | /WLO/NN6/ncl1/put.wl |
| $N_6(x_1, x_2)$ | “ncl2” | /WLO/NN6/ncl2/object.wl | /WLO/NN6/ncl2/put.wl |
| $N_6(x_1, x_2, x_3)$ | “ncl3” | /WLO/NN6/ncl3/object.wl | /WLO/NN6/ncl3/put.wl |
| $N_6(x_1, x_2, x_3, x_4)$ | “ncl4” | /WLO/NN6/ncl4/object.wl | /WLO/NN6/ncl4/put.wl |
| $N_8(x_1)$ | “ncl1” | /WLO/NN8/ncl1/object.wl | /WLO/NN8/ncl1/put.wl |
| $N_8(x_1, x_2)$ | “ncl2” | /WLO/NN8/ncl2/object.wl | /WLO/NN8/ncl2/put.wl |
| $N_8(x_1, x_2, x_3)$ | “ncl3” | /WLO/NN8/ncl3/object.wl | /WLO/NN8/ncl3/put.wl |
| $N_8(x_1, x_2, x_3, x_4)$ | “ncl4” | /WLO/NN8/ncl4/object.wl | /WLO/NN8/ncl4/put.wl |
| $N_{12}(x_1)$ | “ncl1” | /WLO/NN12/ncl1/object.wl | /WLO/NN12/ncl1/put.wl |
| $N_{12}(x_1, x_2)$ | “ncl2” | /WLO/NN12/ncl2/object.wl | /WLO/NN12/ncl2/put.wl |
| $N_{12}(x_1, x_2, x_3)$ | “ncl3” | /WLO/NN12/ncl3/object.wl | /WLO/NN12/ncl3/put.wl |
| $N_{12}(x_1, x_2, x_3, x_4)$ | “ncl4” | /WLO/NN12/ncl4/object.wl | /WLO/NN12/ncl4/put.wl |
| $N_{16}(x_1)$ | “ncl1” | /WLO/NN16/ncl1/object.wl | /WLO/NN16/ncl1/put.wl |
| $N_{16}(x_1, x_2)$ | “ncl2” | /WLO/NN16/ncl2/object.wl | /WLO/NN16/ncl2/put.wl |
| $N_{16}(x_1, x_2, x_3)$ | “ncl3” | /WLO/NN16/ncl3/object.wl | /WLO/NN16/ncl3/put.wl |
| $N_{16}(x_1, x_2, x_3, x_4)$ | “ncl4” | /WLO/NN16/ncl4/object.wl | /WLO/NN16/ncl4/put.wl |

## Availability

The above files are available at https://www.hcsl.com/Supplements/hcsltr22s.zip

## Permanent Citation:

RA Chatzimichail, AT Hatjimihail: *Intelligent Quality*: A Software Tool for Exploring the Application of Convolutional Neural Networks to Quality Control Samples of Very Small Size. Technical Report XXI, Supplement. Drama: Hellenic Complex Systems Laboratory, 2022.

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First Published: June 18, 2022

Revised: July 05, 2022