



Feb 27, 2020

Predicting_MWM_with_ANN

Akinori Higaki¹, Masaki Mogi², Jun Iwanami³, Li-Juan Min³, Hui-Yu Bai³, Bao-Shuai Shan³, Masayoshi Kukida¹, Harumi Kan-no³, Shuntaro Ikeda¹, Jitsuo Higaki¹, Masatsugu Horiuchi³

¹Department of Cardiology, Pulmonology, Hypertension and Nephrology, Ehime University, Graduate School of Medicine, Tohon, Ehime, ²Department of Pharmacology, Ehime University, Graduate School of Medicine, ³Department of Molecular Cardiovascular Biology and Pharmacology, Ehime University, Graduate School of Medicine

1 Works for me dx.doi.org/10.17504/protocols.io.k76czre



Akinori Higaki
Ehime University Graduate School of Medicine



ABSTRACT

>> We would share the raw data and python scripts used in the study 'Predicting the outcome of Morris water maze test in vascular dementia mouse model with deep learning' published for PLoS One.
>> 'ann_pred_0114.py' is the main code of ANN constructed with Chainer framework. This code can read 'data_set_0114.xlsx' and run the deep learning program. This code also includes the cross validation method and calculation for correlation coefficient.
>> In 'data_set_0114.xlsx' file, you can see raw MWM data for WT-sham, WT-BCAS and WT-control mice.
>> "svr_pred_0114.py" is a script file for prediction with support vector regression (used in Supporting Information).
>> "morris_3day_1204.py" is a script file for predicting the outcome based on 3-day data (used in Supporting Information).

ATTACHMENTS

[morris_3day_1204.py](#)

[ann_pred_0114.py](#)

[data_set_0114.xlsx](#)

[svr_pred_0114.py](#)

Raw_Data

1



This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited