**Github links for using machine learning for eeg signals/data**

<https://github.com/sccn/eeglab> EEG lab tutorial

<https://mne.tools/stable/index.html> MNE tutorial

<https://github.com/vlawhern/arl-eegmodels>

This is the Army Research Laboratory (ARL) EEGModels project: A Collection of Convolutional Neural Network (CNN) models for EEG signal processing and classification, written in Keras and Tensorflow. The aim of this project is to

-provide a set of well-validated CNN models for EEG signal processing and classification

-facilitate reproducible research and

-enable other researchers to use and compare these models as easy as possible on their data

<https://github.com/rmndrs89/my-gait-events-tcn> - Gait events detection from wearable inertial measurement units based on a temporal convolutional neural network

**Youtube link**

<https://www.youtube.com/@tritonneurotech3451> ML methods with EEG data + Kaggle Competitions

(University of San Diego Neurotech )

**Kaggel notebooks/competitions**

[**https://www.kaggle.com/code/sam1o1/eeg-signal-processing**](https://www.kaggle.com/code/sam1o1/eeg-signal-processing)

[**https://www.kaggle.com/code/ericwyeah/eric-wilson-neural**](https://www.kaggle.com/code/ericwyeah/eric-wilson-neural)

[**https://www.kaggle.com/competitions/ucsd-neural-data-challenge/code**](https://www.kaggle.com/competitions/ucsd-neural-data-challenge/code)

**MDPI Articles**

[**https://www.mdpi.com/1424-8220/16/10/1634**](https://www.mdpi.com/1424-8220/16/10/1634)

[**https://www.mdpi.com/1424-8220/23/2/745?type=check\_update&version=2**](https://www.mdpi.com/1424-8220/23/2/745?type=check_update&version=2)

[**https://www.mdpi.com/1424-8220/22/11/4242**](https://www.mdpi.com/1424-8220/22/11/4242)

[**https://www.mdpi.com/2076-3417/12/1/415**](https://www.mdpi.com/2076-3417/12/1/415)

**ResearchGate**

[**https://www.researchgate.net/lab/UCF-BRaIN-Lab-PI-Helen-J-Huang-Helen-J-Huang**](https://www.researchgate.net/lab/UCF-BRaIN-Lab-PI-Helen-J-Huang-Helen-J-Huang)

[**https://www.researchgate.net/publication/278792694\_Isolating\_gait-related\_movement\_artifacts\_in\_electroencephalography\_during\_human\_walking**](https://www.researchgate.net/publication/278792694_Isolating_gait-related_movement_artifacts_in_electroencephalography_during_human_walking)

[**https://www.researchgate.net/publication/285383442\_Independent\_Component\_Analysis\_of\_Gait-Related\_Movement\_Artifact\_Recorded\_using\_EEG\_Electrodes\_during\_Treadmill\_Walking**](https://www.researchgate.net/publication/285383442_Independent_Component_Analysis_of_Gait-Related_Movement_Artifact_Recorded_using_EEG_Electrodes_during_Treadmill_Walking)

[**https://www.researchgate.net/publication/340041411\_Classification\_of\_EEG\_Motion\_Artifact\_Signals\_Using\_Spatial\_ICA**](https://www.researchgate.net/publication/340041411_Classification_of_EEG_Motion_Artifact_Signals_Using_Spatial_ICA)

[**https://www.researchgate.net/publication/328988276\_A\_Deep\_Learning\_Architecture\_to\_Detect\_Events\_in\_EEG\_Signals\_During\_Sleep**](https://www.researchgate.net/publication/328988276_A_Deep_Learning_Architecture_to_Detect_Events_in_EEG_Signals_During_Sleep)

**Tutorials**

[**https://ataspinar.com/2018/04/04/machine-learning-with-signal-processing-techniques/**](https://ataspinar.com/2018/04/04/machine-learning-with-signal-processing-techniques/)

[**https://medium.com/@vishal.mi19/processing-eeg-data-with-python-8036fd7336ca**](https://medium.com/@vishal.mi19/processing-eeg-data-with-python-8036fd7336ca)

[**https://neuro.inf.unibe.ch/AlgorithmsNeuroscience/Tutorial\_files/Introduction.html**](https://neuro.inf.unibe.ch/AlgorithmsNeuroscience/Tutorial_files/Introduction.html)

[**https://iq.opengenus.org/eeg-signal-analysis-with-python/**](https://iq.opengenus.org/eeg-signal-analysis-with-python/)

[**https://escholarship.org/uc/item/5tg8k05h**](https://escholarship.org/uc/item/5tg8k05h)

[**https://towardsdatascience.com/decoding-brain-signals-with-machine-learning-and-neuroscience-bee288c1d585**](https://towardsdatascience.com/decoding-brain-signals-with-machine-learning-and-neuroscience-bee288c1d585)

[**https://hal.inria.fr/hal-03514375/document**](https://hal.inria.fr/hal-03514375/document)

**IEEE papers**

[**https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9411857**](https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9411857)

[**https://ieeexplore.ieee.org/document/9669579**](https://ieeexplore.ieee.org/document/9669579)

[**https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9734730**](https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9734730)

**Other**

[**https://www.cse.uconn.edu/wp-content/uploads/2022/04/EEGPosterOfficial.pdf**](https://www.cse.uconn.edu/wp-content/uploads/2022/04/EEGPosterOfficial.pdf)

[**https://arxiv.org/pdf/2102.03987.pdf**](https://arxiv.org/pdf/2102.03987.pdf)

[**https://arxiv.org/pdf/1807.05981.pdf**](https://arxiv.org/pdf/1807.05981.pdf)

[**https://arxiv.org/pdf/2004.05811.pdf**](https://arxiv.org/pdf/2004.05811.pdf)

[**https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6354999/**](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6354999/)

[**https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4416798/**](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4416798/)

[**https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7164221/**](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7164221/)

[**https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9271576/**](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9271576/)

[**https://www.sciencedirect.com/science/article/abs/pii/S0925231221015307**](https://www.sciencedirect.com/science/article/abs/pii/S0925231221015307)

[**https://www.frontiersin.org/articles/10.3389/fspor.2022.945341/full**](https://www.frontiersin.org/articles/10.3389/fspor.2022.945341/full)

[**https://ntnuopen.ntnu.no/ntnu-xmlui/bitstream/handle/11250/2566519/19060\_FULLTEXT.pdf**](https://ntnuopen.ntnu.no/ntnu-xmlui/bitstream/handle/11250/2566519/19060_FULLTEXT.pdf)

[**https://journals.sagepub.com/doi/full/10.1177/20552076221075147**](https://journals.sagepub.com/doi/full/10.1177/20552076221075147)

[**https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0277257#sec002**](https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0277257#sec002)

[**https://www.medrxiv.org/content/10.1101/2022.05.02.22274438v1.full**](https://www.medrxiv.org/content/10.1101/2022.05.02.22274438v1.full)

[**https://www.frontiersin.org/articles/10.3389/fnagi.2022.927295/full**](https://www.frontiersin.org/articles/10.3389/fnagi.2022.927295/full)

[**https://vuir.vu.edu.au/42489/1/ZAROUG\_Abdelrahman-thesis\_nosignature.pdf**](https://vuir.vu.edu.au/42489/1/ZAROUG_Abdelrahman-thesis_nosignature.pdf)

[**https://journals.physiology.org/doi/full/10.1152/jn.00104.2011**](https://journals.physiology.org/doi/full/10.1152/jn.00104.2011)

[**https://researchonline.ljmu.ac.uk/id/eprint/13670/8/A%20new%20machine%20learning%20based%20approach%20to%20predict%20Freezing%20of%20Gait.pdf**](https://researchonline.ljmu.ac.uk/id/eprint/13670/8/A%20new%20machine%20learning%20based%20approach%20to%20predict%20Freezing%20of%20Gait.pdf)

[**https://stars.library.ucf.edu/cgi/viewcontent.cgi?article=7281&context=etd**](https://stars.library.ucf.edu/cgi/viewcontent.cgi?article=7281&context=etd)

[**https://voicesneurolab.com/wp-content/uploads/2021/11/Barros\_et\_al2021\_AIM.pdf**](https://voicesneurolab.com/wp-content/uploads/2021/11/Barros_et_al2021_AIM.pdf)