

Aim of the Assignment

- The aim of this assignment is to do practice on what you have learned in the lectures.
- In this assignment you shall classify **Breast Cancer** datasets, using Artificial Neural Network. You shall present and explain your code in an oral examination.

Assignment 8

Date: 23 June 2021

A1: Classification of Breast Cancer dataset in *Scikit-learn* (Python)

- Classify the Breast Cancer dataset using the algorithm Artificial Neural Network. Following content should be included in your model
 - Multilayer Perceptron
 - Activation and loss function
 - Gradient Descent
 - Backpropagation
- Write your code and results in report form.
- Classify each dataset using either cross-validation or train-test split
- Each result shall be presented with accuracy score

A2: Classification of breast cancer dataset in *Scikit-learn* (Python)

Classify the breast cancer dataset using the algorithm Artificial Neural Network. Following content should be included in your model

- Activation and loss function
 - Gradient Descent
 - Backpropagation
 - Multilayer Perceptron
- . Write your code and results in report.
 - Classify each dataset using either cross-validation or train-test split.

- Each result shall be presented with accuracy score.
- **Note: You are not allowed to use libraries.**

Dataset

Dataset	Format	Description
Breast Cancer	CSV	The standard Breast cancer dataset CSV formats Download link: https://archive.ics.uci.edu/ml/index.php

Here are some useful guides to get you started:

Scikit-learn:

- [Your First Machine Learning Project in Python Step-By-Step](#)
- [A Neural Network Playground](#)

Due Date:1 July 2021 11:59 PM