

CS112 Project-1

Submission deadline: **26 May 2022**

Group size: 3 persons max.

Artificial intelligence-based controller to play tic tac toe game

Statement: In this project, you will be given a file containing learning data for an AI module, you will develop an AI system that read the learning data from the file, learns the problem to be solved and then works for the new data given to it. The case study here is of a tic tac toe game.

Data: You can download the learning data from: <https://archive.ics.uci.edu/ml/datasets/Tic-Tac-Toe+Endgame>

AI module: Your AI module will be an Artificial Neural Network (ANN), that will learn to play the game using the data provided to it. This data is called the *training data*.

Output: Once your AI model is trained, it will play against a human.

Coding scheme: C++ and object-oriented solution

Text tutorial: <https://towardsdatascience.com/an-illustrated-guide-to-artificial-neural-networks-f149a549ba74>

Short tutorial on ANN:

Option-1: <https://www.youtube.com/watch?v=bfmFfD2RIcg>

Option-2: <https://www.youtube.com/watch?v=LPpKkVzR9-M>