# Machine Learning Workshop Tic-Tac-Toe Project

Martin Mrugała Patryk Walczak Filip Szymczak Bartek Żyła Maciej Zalewski

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### Introduction

#### 1.1 Standard Tic-tac-toe

According to the definition in the Oxford Dictionary of English, Tic-tac-toe is a game in which two players seek to complete a row of either three noughts or three crosses drawn alternately in the spaces of a grid of nine squares.

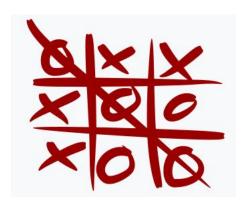


Figure 1.1: A completed game of Tic-tac-toe<sup>1</sup>.

And as it turns out, there are 255 168 possible games. So this means that, with the help of the reinforcement learning, a bot may train to mastery.

<sup>&</sup>lt;sup>1</sup>Source of the image: https://en.wikipedia.org/wiki/Tic-tac-toe

### 1.2 Our implementation

Our team decided to create a bot which would play this game but in an expanded version of it. The principal changes concern, inter alia:

- The size of the grid could be infinite Infinite
- Another entry in the list

```
class MyClass(Yourclass):
def __init__(self, my, yours):
bla = '5 1 2 3 4'
print bla
```