PROJECT REPORT

Name: Arsenii Panov

Project name: Artificial Intelligence for StarCraft 2

Duration: October 2020 - March 2021

Description:
The overall goal of this project is to develop a method that can autonomously identify and implement game strategies in StarCraft 2. Collected game data serves as a basis to create and train a neural network that implements a game strategy based on player decisions. The student's subgoal in this project was to implement a kernel-k-means algorithm to cluster strategies in the captured data.

Completed tasks:
- Research on using the pandas and numpy libraries in python for data analysis
- Selection of the kernel-k-means as clustering method for the given goal
- Literature Research on kernel-k-means
- Development of a machine learning pipeline for the given problem
- Testing of kernel-k-means on two setups with different base-features

Evaluation: accepted

Supervising institution: Bielefeld University of Applied Sciences (Germany)

Supervisor: Prof. Dr. Christian Schwede   27.05.2021 _____