Politechnika Śląska

Katedra Grafiki, Wizji komputerowej i Systemów Cyfrowych

Academc year			Group	Section
2022/2023	SSI	**BIAI**	**GKiO1**	**1**
Supervisor:	mgr inż. Grzegorz Baron		**Classes: (day, hour)**	
Section members:	**Mateusz Grabarczyk** **Jakub Michałuszek**		**Tuesday**	
emails:	**mategra240@student.polsl.pl** **jakumic451@student.polsl.pl**		**9:45 AM**	

Project card

Subject:

Predicting stock price using machine learning

Main assumptions:

1. Overview

As we are interested in investing, we wanted to make a model which can predict stock price. Stock market can be hard to predict as some random situations may happen (for instance, COVID). Nevertheless, it's a good practice and interesting topic. Of course, it won't be any financial advice.

2. Method of implementation

We are going to do this project in Python, using many libraries which are listed down below. Of course, the environment will be Jupiter Notebook, which is an amazing tool for working with data related topics. For instance, we will use: Pandas, Numpy, Matplotlib, TensorFlow and Keras. Before we start working on this dataset, we will filter the data, see whether there are some duplicates etc. The rest of the things to discuss will be done during analysis. For now, after training the model, we want to predict one month of the next year.

3. Sources

The data source will be this data set: https://www.kaggle.com/datasets/varpit94/google-stock-data. It's downloaded from official NASDAQ market and it's very reliable. We will take certain period that didn't have any major random situation, which for now is from 2012 to 2017.