



Final project of:
Neural Networks and Deep Learning

**Implementing an application using one of the research papers in
deep learning**

Faculty of Computer Science and Telecommunications
Cracow University of Technology
Spring 2022

For the final project, select an application you are interested in or it may be a project in your company that deep learning can be applied to it and use deep learning to solve it.

You have two options for the implementation.

- Your implementation can be based on one of the ideas presented in recent research papers in the deep learning area.
- You can also implement your own idea with up to 20 points extra credit.

This project consists of the following parts:

Your source codes and execution.

Explaining the dataset you have used.

Explaining in details the approach you used.

Tune hyper-parameters and show its effect on the performance of your approach.

Providing a report highlighting different parts of your tasks.

Providing a short video presenting your work.

Presenting your work. It will be in-person or online.

You get credit according to the factors as the importance, being state-of-the-art of the approach in today's deep learning algorithms, the correctness of the code, having right dataset according to the algorithm, having promising results, your report, and your presentation.

This project can be accomplished as groups of two and both students are responsible for the project and of course the presentation. Although you can divide the subtasks between yourselves.

In rare cases if the project is big or complicated, three group members is also acceptable.