## Approximation approaches - from Fourier analysis to deep learning [221660-0553], Summer 2020/21

## **Final Project Guidelines**

## Final report should contain:

- Introduction, where you describe the topic and why you decide to use the neural networks in such domain
- Short description of dataset and basic exploratory data analysis.
- Description of the neural network architecture you decide to use in the project.
- Summary of the learning process, where you show entire learning procedure (dataset preparation, hyperparameter tuning, etc.) and select the best model.
- Final remarks
- Bibliography

Project can be prepared in groups made up of **max three students**. There are no limitations on the size of the report. It should be prepared in one of the following file formats: **.pdf**, **.ipynb**, **.html** or **.doc**; package must contain not only the report itself, but also all the codes and datasets used in your work. Julia programming language and Flux.jl framework are preferred tools for this taks, however you could also prepare it in other programming languages (Python, Java, C) and frameworks (Keras, TensorFlow, PyTorch, etc.), but you need to confirm it with a lecturer (Bartosz Pankratz) before.

Package with a project should be sent to the following address: <a href="mailto:bpankra@sgh.waw.pl">bpankra@sgh.waw.pl</a>.

Deadline: 11th June 2021