

Assignment 1

The assignment is dedicated for Gale-Shapley Algorithm. Gale-Shapley Algorithm is used on many real-world problems, where there are necessary to match two sides. For example, as it was said on the lecture, the algorithm was used at the National Residency Match Program, a system that assigns new doctors to hospitals around the United States.

For the assignment you can either choose one of the tasks:

You task is to find another example, where Gale-Shapley is used in the world. You need to define what is the problem, what are the two sides of the problem, and how was Gale Shapley algorithm was applied to solve the problem.

OR

You task is to find a problem, which wasn't solved by Gale-Shapley algorithm, but can be solved by the algorithm. You need to define what is the problem, what are the two sides of the problem, and how Gale-Shapley Algorithm can be used to solve the problem.

The report:

You should provide the report with Times New Roman font and the size should be 14. The report should be at least 1 page long. You can work in the group of **at most 2 students**. You should upload the report into Moodle. After uploading, you need to demonstrate the report on the practice lesson. The format of the file, that you upload should be pdf.

Grading:

Total points – 5

Defining the problem – 1.5

Defining the sides of the problem – 1.0

Providing the solution – 1.5

Following the rules of the report – 1.0

Deadline: January 31st, 2021, 23:59. Each late day – 20% penalty