Parameterized Algorithms: winter semester 2018/19

Evaluation criteria

Two components of student's performance will determine their final grade: homeworks and oral exam at the semester's end. In principle, they should have a similar weight, but they will be counted differently.

Homeworks. We plan to have around 6 batches of homework exercises, each consisting of 3 exercises. The difficulties of exercises will vary (i.e. it is not necessary the case that there is an easy, a medium, and a difficult one), but the should be ordered roughly with increasing difficulty (in our opinion). Each batch will have a 3-4 week period between publishing and deadline, so there will be some overlaps between the batches. The solutions may be either (preferred) typed in tex and sent by e-mail to all the instructors, or (not preferred) given on paper to any of the instructors. Allowed languages of solutions are English and Polish.

Solutions for each exercise will be graded in the so-called olympic scale:

- Full solution: 6 points
- Full solution with minor issues: 5 points
- At least half of a solution: 2 points
- Anything less: 0 points

Note that anything less than half a solution is rounded down to 0 points. There might be some variations, like additional items for bonus points. As usual, solutions should be described in a clear mathematical style and serious presentation issues may lead to reducing the score. There is a code of honor of not searching the solutions in research papers. Looking at Wikipedia and standard textbooks on parameterized algorithms is allowed.

Based on the total score from homeworks, a grade modifier from $\{-1.0, -0.5, 0.0, +0.5, +1.0, +1.5\}$ will be given. This modifier will be added to the grade from the oral exam. The cutoffs for modifiers will be exactly decided during the semester, but roughly it should be like this:

- To get modifier -0.5 one should solve at least one exercise from most of the homework batches.
- Consistently solving at least one exercise from every batch, and sometimes a bit more, should be sufficient for modifier 0.0.
- To get modifier +1.5 one should solve at least two exercises in every batch, and sometimes all three.

Oral exam. The exam will be based on a random pick of several questions from various topics that were discussed during the semester. The exact form will be determined later, but in principle there will be a question from each major topic and the examination should take around 45 minutes per person. The grade from the oral exam will be from the set $\{-\infty, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5\}$. After adding the modifier from homeworks, the grade will be rounded as follows:

- Everything below 3.0 maps to 2 (not pass).
- Everything above 5.5 maps to 5!.
- 5.5 maps to 5.
- All the other grades stay unchanged.