

Adv Dig Sys. Final exam, 7 May 2018  
time 1:30 hours

1) Application of combinatorial optimization

Think up a multi-objective problem that is suitable to be solved by Combinatorial Optimization (aka COIN). Explain that problem and how you design the algorithm to solve it.

1. how to encode the solution
2. what is the objective function

2) Read a research paper, answer the following points  
(from PLOS 2018)

1. Summarize this paper in less than one page.
2. What is the problem they try to solve?
3. What is the instance of data that they experiment with?
4. What method they propose?
5. Discuss the result.

3) Discuss the following open question

We know from NFL that no black box optimizer that is good for all problems. EC can be considered to be a black box optimizer. What is EC good for? What is the strength and weakness of EC method?

Enjoy!