

FUNDAMENTAL ALGORITHMIC TECHNIQUES SPRING 2013 PROJECT THEMES

The projects can be one of follows:

1. Graph matching
2. Graph Coloring
3. Network Flow
4. FPGA-based Algorithm Implementation
5. Fast Fourier Transform and Its Applications
6. Closest Pair of Points
7. Linear Programming and Its Applications
8. Sorting Networks

In each project followings should be achieved:

1. The problem and underlying model should be well defined.
2. At least 2 important algorithms in this field should be selected and implemented (You can prefer any computer language).
3. Algorithms should be compared both theoretically and practically.
4. A comprehensive report and a presentation should be prepared.

Groups of 2 and 3 students are wanted.

Bonus: Any contribution (an extensive performance evaluation, extension of an algorithm, designing a new algorithm) will be graded with extra 20 points.

Project Deadlines:

- 8 April 2013: Choice of the project subject.
- 22 April 2013: The Project Proposal: Aim of the project with the selected algorithms should be described briefly. The reason to choose these algorithms should be given.
- 24 May 2013:
Final Report and Project Codes.
- 27 May 2013:
Project Presentations (Each should be at least 30 mins.) Please prepare your implementation environment during presentation.

Submissions should be made to both e-mail addresses:

orhandagdeviren@gmail.com, orhan.dagdeviren@ege.edu.tr

Notes:

- These topics will be included in final exam.
- A good work will be awarded with a suitable publication.

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