Computational Problems in Coding and Communications

ABSTRACT
The goal of this project is to do research related to one or more computational problems in coding and communications. The detailed topic is open for discussion. Interested students are encouraged to make an appointment by email.

TASK OUTLINE
- Study the coding theory and its applications in communications
- Study some algorithms in coding theory published technical papers
- Improve the algorithms and implement them in Matlab/Maple/C/C++
- Typeset the results as a research paper

REQUIREMENT
- Eager to learn how to do research
- Enjoy the satisfaction of solving conceptual problems
- Intend to pursue a postgraduate study
- Receiving good grades on Mathematics, Coding and Communications related courses would be a bonus, though not a must.

WHAT YOU WILL GAIN
- You’ll learn all the steps of how to do research
- You’ll have the privilege to work in the Signal Processing and Communications Laboratory and closely interact with postgraduate students having rich research experience in the area
- You’ll have the opportunity to establish a distinguished undergraduate track record by publishing your first research paper
- You’ll have the opportunity to present the result at an international conference with partial financial support

TEAM SIZE: 1 student, preferably (at most 2)

NO. OF TEAMS: 1 to 3

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