

# CS 591 Randomized Algorithms, HW3

Prof. Jared Saia, University of New Mexico

*Due: November 4th.*

## 1 Project Proposal

In this assignment, you will create a project proposal. You are encouraged to do this in groups of two to four students. The main deliverable for this hw is a paper of no more than six pages which contains the following information.

1. A statement of the general problem that you want to explore in your project. You should describe why this problem is important: i.e. would a solution lead to a faster networking protocol? would a solution lead to a better understanding of some mathematical concept?
2. A concise statement of analytical problem(s) you plan to solve. You should give at least one easy problem and one hard problem. These mathematical problems should all be related to your general problem of interest.
3. A description of the probabilistic tools you plan to use to solve your problems.
4. A survey of past work on your general problem. This should include descriptions of at least 5 related papers.
5. A description of the work that needs to be done for the project, a plan for how you will complete this work and how the work will be divided up among the group (if applicable).
6. Preliminary results if any!