

Project Requirements

Emerging Topics for Network Security

Submission requirement

- Each team submits one proposal or report only. Please include the names of all team members in the submission
- You are strongly suggested to use the format template posted on the course website
- Your final report should be 8 to 9 pages when you use the suggested template (or equivalent when you use other formats)
- No page requirement for your proposal and interim report (I suggest 1 – 2 pages for the proposal, and 5 – 6 pages for the interim report)

About the survey paper

- Some students choose to do a survey paper, but may not be very familiar with how to write a survey paper.
- A survey paper is expected to summarize 20 to 30 papers. It should always follow some organization.
- A bad example

- “In this survey, we will examine existing techniques on the smartphone security. To the best of our knowledge, we have identified 50 papers in this area, and we summarizes these papers below:
paper 1 talks about
paper 2 talks about....
.....
paper 50 talks about.....”

How to write a survey paper

- A good survey always gives taxonomies and comparative results.
- An example organization

• “In this survey, we will examine existing wireless key establishment techniques. We think this topic is important because We classify the existing techniques into n categories based on the following critical aspects: (1)....., (2).....,(n).....” Then, for each category, discuss the similarity and difference between the approaches in this category, and summarize and point out possible future research directions you can think of.

Grading of the project

- Proposal, interim report, and final report contributes to 30%, 30%, 40% of your final project credit, respectively.
- Please proceed with your project if you haven't be contacted for the proposal resubmission.

About the interim report

- The interim report is due at 11:59pm March 27th
- You are expected to show the following things on your interim report
 - For survey paper, you have already collected enough papers on the topic you choose, and you created a taxonomy of them.
 - For technical paper, you have already found a potential solution to the problem you proposed in your proposal, and you have a good reason to convince people that your solution is an effective one

About the final report

- You final report is due at 11:59pm April 20th
- You final report should include your evaluation result
- You may do evaluation through theoretical analysis, computer simulation, or even real-world experiment if you have the relevant equipment.
- For the technical paper, you final report should be organized as follows
 - **Section 1-Introduction:** why would you like to do this technical paper
 - **Section 2- Related work:** what are the existing work and why do you think your method is better than them
 - **Section 3 – Proposed method:** give a high-level overview of you method first, and then explain the details)
 - **Section 4- Evaluation:** give the evaluation setup, evaluation metrics, evaluation objective, and evaluation results.
 - **Section 5 - Conclusion and future work**

Final report (cont'd)

- For the survey paper, your final report should be organized as follows
 - **Section 1-Introduction:** why would you like to do this survey
 - **Section 2- Related work:** what are the existing survey papers on the topic you choose
 - **Section 3 – Taxonomy of the literature:** classify the existing techniques into several categories and explain your reason for such a classification.
 - **Section 4- Literature reviews:** describe the techniques under each category and explain the similarity and differences among these techniques.
 - **Section 5 - Conclusion and future work**