

# Projects for EE142 Information Theory 2024-Fall

Instructor: Prof. Youlong Wu

November 28, 2024

A research project related to a topic in information theory is a required portion of this course. The project, to be done in group (at most **2** students), will consist of a short, professional, and well-written English **report**.

- **Suggested Topics:**

- IT meets Machine Learning
- IT meets Distributed Learning
- Semantic Information Theory
- IT meets Biology
- Joint Sensing and Communication
- Any topic selected from papers winning *IT Society Paper Award*
- Others (The topics should be chosen in consultation with the course instructor.)

We list several papers related to the topics above on this website:

<https://epan.shanghaitech.edu.cn/l/HFjs2t>

- **Final report:**

- **Deadline: 12 Jan 2025.**
- State the contributions of each group member in the report.
- It should be written in **English** and edited by **LaTeX**, **at most 8 pages two-column** in IEEE conference format.
- An abstract summarizing the main ideas is required and should be written by yourself (Do not copy the abstract of the papers).
- Technique proof should be described clearly.
- You are encouraged to find new idea and try to write a new paper. You may discuss with me if you need my advice. (Don't be shy, you should be ambitious!)

- **Poster Presentation:**

- Each group prints a poster and presents it in the classroom. You could print the poster with multiple A4 papers or in real poster size. **7 minutes + 3minues Q&A.**
- Date: around 16th week in our academic calendar.
- **All group members should present their posters.**