

List of Assigned Papers for the Project

Sr. No	Member 1	Member 2	Paper
1	Vamshi Krishna Bonagiri	Shivansh Subramaniam	Differential Privacy as a Mutual Information Constraint
2	N Harsha Vardhan	Shreya Patil	Divergence measures based on the Shannon entropy
3	Dosapati Sri Anvith	Lokesh V	Quantitative Notions of Leakage for One-try Attacks
4	Shashwat Singh	Abhinav Menon	The Capacity of Single-Server Weakly-Private Information Retrieval
5	Srikar	Hrishi	On the Shannon capacity of a graph
6	Veeral Agarwal	Tanishq Goel	Common randomness and distributed control: A counterexample
7	Anvay Karmore	Alapan Chaudhuri	An inequality on guessing and its application to sequential decoding
8	Aditya Sddheshwar	Chandan Anand	Information Leakage in Index Coding With Sensitive and Non-Sensitive Messages
9	Shashwat Goel	Arushi Mittal	Information-Theoretic Bounds for Differentially Private Mechanisms
10	Abhishek Mittal	Aaryan Singh	On unconditionally secure multi-party sampling from scratch
11	Gunank Jakhar		Privacy-Utility Tradeoff in a Guessing Framework Inspired by Index Coding

Evaluation Plan for the Projects

Initial Evaluation:

When: Last week of March, 2023

Weightage: 5 Marks

Expectations for the evaluation: A 10 minute (slide or board) presentation comprising

1. Preliminaries and Background (especially, for the concepts not covered in the course)
2. Main Problem Statement
3. Further plan, in particular, the students should have a sense of the results of the whole paper and be able to identify the parts/sections that they may not be able to cover for the final evaluation (applicable mainly for lengthy/hard papers) based on which feedback may be given.

Final Evaluation:

When: Last week of April, 2023

Weightage: 15 Marks

Expectations for the evaluation: A 45 minutes (slide or board) presentation comprising

1. Preliminaries and Background
2. Problem Statement
3. Main Result, and the other results
4. Proof (idea) of the results. In particular, the students should know and/or be able to present the proofs of at least some of the results (i.e., at least that of the easy and medium ones).

Note: You may need to look up other material or papers to build up background on the topic of your paper and for some proof details..