Sl. No.	Project Title	Mentor Name	Mentor Email	Mentor Address (Lab)	Project Description
1	Mathematical modeling of exact recovery of SBM communities on partially labeled graphs	Avirup Saha	saha.avirup@gmail.com	CNeRG lab (CSE 205)	Aim is to first understand this paper: https://ieeexplore.ieee.org/abstract/document/8356659
2	Implementing a Knowledge Graph Completion Model	Bishal Santra	bsantraigi@gmai	General Research Lab (CSE Annex Building)	Our main target will be to implement a deep learning model (DKRL) for Knowledge Graph Reasoning/Completion task and run benchmark tests on some new knowledge graphs
3	Entropy Based Filtering of Generic Responses in Dialog Systems	Bishal Santra	bsantraigi@gmail.com	General Research Lab (CSE Annex Building)	We will analyse the effect of entropy based filtering of generic responses on chat datasets for various dialog generation models. https://arxiv.org/abs/1905.05471
4	Development of a generic clinical trial search systems using knowledge bases	Soumyadeep Roy	soumyadeep.roy9@gmail.com	ARCH Lab(Top floor of Takshyashila Building)	We aim to first evaluate and then improve the performance of state-of-the-art clinical trial search systems in the TREC Precision Medicine Track(http://www.trec-cds.org/2018.html), on non-oncology based trials. There will be three broad tasks : 1) Debugging the Github codebases of the SOTA clinical trial systems, and evaluating its retrieval performance on our novel evaluation set consisting of five diseases. 2) Replace the cancer-specific knowledge bases, with generic knowledge bases and study their performance. 3) Annotate the relevant trial set of few more queries.
5	Group dynamics in event-based social networks	Ayan Kumar Bhowmick	ayankumarbhowmick@gmail.com	System and Mobile Research Lab (CSE 204)	We aim to study the evolution of groups in event-based social networks based on the semantics of events they organize and detect whether members belonging to a group will migrate to other groups or not
6	Exploring open world knowledge graph completion models	Paramita Koley	paramita2000@gmail.com	CNeRG lab (CSE 205)	We aim to study various state of the art techniques for knowledge graph completion problem with open world assumption instead of close world assumption.
7	Individual Fairness in Search Ranking	Gourab K Patro	patrogourab@gmail.com	CNeRG lab (CSE 205)	The work will be build a system that implements the paper (link given below) on top of a Lucene/ElasticSearch api. https://doi.org/10.1145/3209978.3210063
8	Exploring Domain aware embeddings for Aspect Based Sentiment Analysis	Rajdeep Mukherjee	rajdeep1989.iitkgp@gmail.com	CNeRG lab (CSE 205)	We aim to explore the literature of Neural Word Embeddings and then look to develop richer domain (Tourism) aware embeddings for the downstream task of Aspect Based Sentiment Analysis.
9	Legal Document Summarization	Paheli Bhattacharya	paheli.cse.iitkgp@gmail.com	General Research Lab (CSE Annex Building)	Abstractive summarization of Indian Supreme Court Case documents
10	Developing a Semi-Definite Programming Based theory for community detection according to Stochastic Block Model	Manjish Pal	manjishster@gmail.com	General Research Lab (CSE Annex Building)	We would like to develop a theory of Semi-Definite Programming and other convex optimization techniques to better understand the performance of Stochastic Block Model. http://math.mit.edu/~bandeira/2015_18.S096_9_Stochastic_Block_Model.pdf
11	Extraction of citations and charts from scientific articles	Rima Hazra	itsrima.iitkgp@gmail.com	General Research Lab (CSE Annex Building)	Extracting citation tags from the latex source of scientific articles. In addition, we extract comperative charts from the articles (may be from pdf).