

ADAPT LAB

(Advanced Data Analytics & Parallel Technologies Lab)

Application for Project Type and Thesis courses

Semester I (2021-22)

This notice is for BE and ME students who are interested in doing research. We, at the ADAPT Lab, are looking forward to motivated students who wish to get associated with us, preferably for at least 2 semesters. You will be working in Project Type or Thesis courses under Prof. Navneet Goyal, Prof. Poonam Goyal or Dr. Jagat Sesh Challa.

Problem	Prerequisite Skills/courses
Multimodal Profiling of persons (Image and voice based)	AI/ML/DM, Image processing, voice signal data
Data Analytics for IOT	ML/DM + understanding of IOT
Deep Learning Models for Multivariate Time series Analytics	ML/DM + Deep Learning + time series modeling
Deep Learning based OCR for Sanskrit	ML/DM + Deep Learning
Sketch-based image retrieval	Image processing + Deep Learning
GPU Computing	ML/DM, Parallel computing, familiarity with CUDA
Cross-device & cross-silo federated learning	ML/DM
Image/ Video Analytics (Visual/IR)	ML/DM/Information Retrieval + Deep Learning
Image captioning & Video description generation	ML/DM/Information Retrieval + Deep Learning
Genome Sequence Assembly algorithms	Biology background, DSA, DM
Multimodal Learning & Multimodal Knowledge graphs	ML/DM/Information Retrieval + Deep Learning
Sound Analytics	ML/DM/Information Retrieval + Deep Learning
Parallelization of ML Algorithms	ML/DM + DSA
Stream Mining	ML/DM + DSA
Machine Learning Applications for Material Science	ML/DM
Anytime ML Algorithms	ML/DM
Data indexing structures for stream analysis in Network forensics	ML/DM + DSA

Link of the form:

<https://forms.gle/saUBspDuGMxLRsjo9>

Last date of submission: TBA