Parallel Computing Laboratory IT-300 Fall-2019

By
Dr. B. Neelima
National Institute of Technology Karnataka
(NITK), Surathkal

Mini-project Guidelines:

Team Details:

- **1.** Please form a team of min. of two or max. of three people, with clear demarcation of the responsibilities while having the complete knowledge of the project
- **2.** You can choose team names and we will identify you with the team name
- **3. Peer-mentors:** A student can peer mentor other teams to help the team achieve their goal. A team using mentorship can acknowledge the team mentor
- **4. Time-less project:** A team can decide to continue their work beyond the semester towards publication. This can be informed to me around the end-sem for working out the avenue to showcase the work. This component does not carry any marks towards IT-300.

Project Guidelines:

- 1. Students can choose any kind of parallelism and any platform...such as OpenMP, MPI, CUDA or Hybrid
- 2. The project can be based on existing work published in a reputed conference or journal, extension of the proven concept, simple application porting, optimization of an application that is already ported, parallelization of algorithms in emerging technology such as machine learning, data science. Etc., or solving or proving scalability and performance issues.
- 3. The team need to identify the category of their mini-project as mentioned above

Note: The students are requested to submit their team details as follows and the CR is requested to share the google sheet of the same by Tuesday, the 24th September 6pm.

S. No.	Team Name	Team	Team	Team	Mini-Project	Mini-Project	Mini-Project	Google Drive
		Members	Members	Mentor (if	Category	Title	Abstract	link for the
		with Reg.	email id	any)			(<75 words)	proposal
		No.						presentation

Required things for the submission of proposal on or before 25th September:

- 1. Identification of teams and mini-projects by 24th September
- 2. On 25th September, students need to bring in a hard copy of the proposal and team should present their proposal (presentation through ppt is preferred)
- 3. The proposal general guidelines are usual format, which will be evaluated
- 4. Technical guidelines are as follows: Index your report, start with abstract, Introduction, literature survey, lacuna in the existing work, motivation, problem statement, methodology, implementation strategy, expected results, timeline plan and team load distribution, challenges involved, conclusions are required at minimum.
- 5. The same can be followed in your presentation

Evaluation:

Firstly, evaluation is considered for all aspects including team management, technical report writing skills and presentations skills as well as technical skills

- 1. Weekly Lab evaluations to be done for 10M and averaged to 10M ==10M
- 2. Mid-sem evaluation: One random program: 15M (5M viva + 10M program (5M for effort + 5M for execution) + Proposal of mini project for 10M (5M for proposal report + 5M for proposal strength and presentation) = 25M

- 3. End-Sem Evaluation: Mini project results and evaluations 25M (10M for report + 10M for presentation and results + 5M for novelty) = 25M
- 4. Total to 60M to be considered for 40% of total marks of IT-300
- 5. Actual 40% marks = marks obtained * 40 /60 = Final Laboratory marks

If I miss any point or not clear or you wish to add/remove something, please let me know your concerns through your CR.