High Performance Optimizations and Dynamic Load Balancing for Computational Aerodynamics Solvers

Blessy Boby TVE15CS020
Gmon K TVE15CS024
Shilpa S TVE15CS055
Robin R LTVE15CS068

Under the guidance of
Prof. Dr. Ajeesh Ramanujan
College of Engineering, Trivandrum
Harichand M. V
Scientist Engineer, Vikram Sarabhai Space Centre

Project Outcomes

Project Outcomes

PrO1 : Study of the requirements which include analysis of .su2 file , graph file etc.
PrO2 : Construction of adjacency matrix from given mesh file.
PrO3 : Partitioned mesh file.
PrO4 : Developed centralized approach, peer-to-peer approach and optimized it in greedy way
PrO5 : Publish a research paper based on the project

Program Outcomes

Program Outcomes

PO1 : Engineering Knowledge
PO2 : Problem Analysis
PO3 : Design and development of solutions
PO4 : Conduct investigations of complex problems
PO5 : Modern tool usage
PO6 : The Engineer and Society
PO7 : Environment and Sustainability
PO8 : Ethics
PO9 : Individual and team work
PO10 : Communication
PO11 : Project management and finance
PO12 : Life-long learning

Program Specific Outcomes

Program Specific Outcomes

PSO1 : Model computational problems by applying mathematical concepts and design solutions using suitable data structures and algorithmic techniques.
PSO2 : Design and develop solutions by following standard software engineering principles and implement by using suitable programming languages and platforms
PSO3 : Develop simple system solutions involving both hardware and software modules.

Project Outcome to Program Outcome Mapping

PrO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
PrO1	3	2	3	3	3	2	3	3	4	4	3	2	3	3	-
PrO2	4	3	3	4	4	3	2	3	3	4	2	1	3	3	3
PrO3	4	3	3	4	3	3	3	3	2	4	2	1	3	3	3
PrO4	4	3	3	4	3	3	3	3	2	4	2	3	3	3	3
PrO5	4	3	3	2	2	3	2	3	2	4	4	3	3	-	-