

Report

Science Academies Virtual Lecture Workshop on Scientific Computations (08.10.2021 to 09.10.2021)

The Department of Computer Science & Technology of Madanapalle Institute of Technology & Science (UGC – Autonomous) organized the **Science Academies Virtual Lecture Workshop on “Scientific Computations”** from **October 08 to 09, 2021**. 135 Participants (PG Students, Research Scholars and Faculty Members) belonging to the Department of Computer Science/Applications, Statistics and Mathematics from various colleges attended the workshop.

Day 1:

The inauguration started at 10 am with the prayer song. Dr.M.Sreedevi, Professor and Head, Department of Computer Science & Technology welcomed the gathering. *Dr.P.Kandasamy, Convenor of this workshop* felicitated the gathering.

The technical session I and II were handled by Dr. Girija Jayaraman, FNASc., Retired Professor, IIT Delhi. The title of the talk was on “Computational issues in Biological modelling”. It was followed by the technical session III by Dr.V.Raghavendra, Professor, IIT Tirupati. His talk focuses on “Introduction to Finite Elements – Theoretical Part”. Technical Session IV was handled by Dr.M.Sreedevi, Professor and Head, Department of Computer Science & Technology, Madanapalle Institute of Technology & Science (UGC – Autonomous). She delivered her talk on “Machine Learning Algorithms”.

Day 2:

The technical session V and VII was handled by Dr. S.Padma, Coordinator and Asst Prof, Department of Computer Science & Technology, Madanapalle Institute of Technology & Science (UGC – Autonomous). She delivered talk on “Hyper parameters in Machine Learning”. Technical Session VI and VIII was handled by Dr.P.Kandasamy, FNASC., Retired Professor, Bharathiar University, Coimbatore. He delivered his talk on “Simpler Algorithms”.

Finally, the Valedictory function began at 4pm. The participants shared their experience and the learning they had in the 2 days. The two day workshop report was delivered by the workshop co-ordinator Dr.S.Padma, Asst. Prof. Department of Computer Science & Technology, Madanapalle Institute of Technology & Science (UGC – Autonomous). The Vote of Thanks for the participants is delivered by

Dr.K.Dinesh, Asso. Prof. Department of Computer Science & Technology, Madanapalle Institute of Technology & Science (UGC – Autonomous). With this the event ends successfully.

Recording has started. This meeting is being recorded. By joining, you are giving consent for this meeting to be recorded. Privacy policy

People

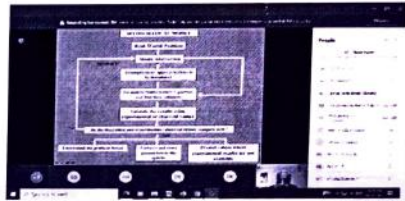
- Share Invite
- GI girija jeyaraman (Guest)
- HM Harivardhan Kumar Raju M
- HG Himanshu Gata
- KB Keerthi Reddy B
- KB Keerthi B On Hold
- MT Madhu Madhan T
- MS Mohammed Ahsraf S
- PG Prady G
- SJ Saksham Jan
- SD Srachartha D On Hold
- YM Yashwanth M On Hold

Indian National Science Academy, New Delhi
The National Academy of Sciences, Allahabad
Indian Academy of Sciences, Bangalore

Sponsored
Science Academies' Virtual Lecture Workshop on "Scientific Computations"

Organized by
**Department of Computer Science & Technology,
Madanapalle Institute of Technology & Science, Madanapalle – 517 325
Andhra Pradesh, India**

08th & 09th October, 2021 (Friday & Saturday)



Optimization Problem

The generic formulation of the optimization problem can be expressed as the min:

$$\begin{aligned} \text{Minimize } & f(x) = f(x_1, \dots, x_n) \\ \text{subject to } & g_i(x) = 0, i=1, 2, \dots, k \\ & h_j(x) \leq 0, j=1, 2, \dots, m \end{aligned} \quad (1)$$

where $f(x)$, $g_i(x)$, $h_j(x)$ are the functions of design variables $f(x)$ is the objective function of the mathematical model subjected to the optimization problem with the equality constraints and inequality constraints and \mathbb{R}^n is the design variable with an dimensions. \mathbb{R}^n is the design space ($f, g, h \in \mathbb{R}^n \rightarrow \mathbb{R}^1$)



2021-22