



Hope Foundation's
Finolex Academy of Management & Technology, Ratnagiri
Department of Master of Computer Applications

Workshop On Parallel Programming on NVIDIA GPU using CUDA

The **Department of Master of Computer Application** organized a **5-Day Workshop on “Parallel Programming on NVIDIA GPU using CUDA”** from **24th August 2026 to 29th August 2026**, in online mode.

The workshop was organized for **MCA students and faculty members** with the objective of providing comprehensive knowledge of parallel programming using NVIDIA GPU and CUDA, focusing on both fundamental concepts and practical implementation. A total of **140 participants** participated in the workshop.

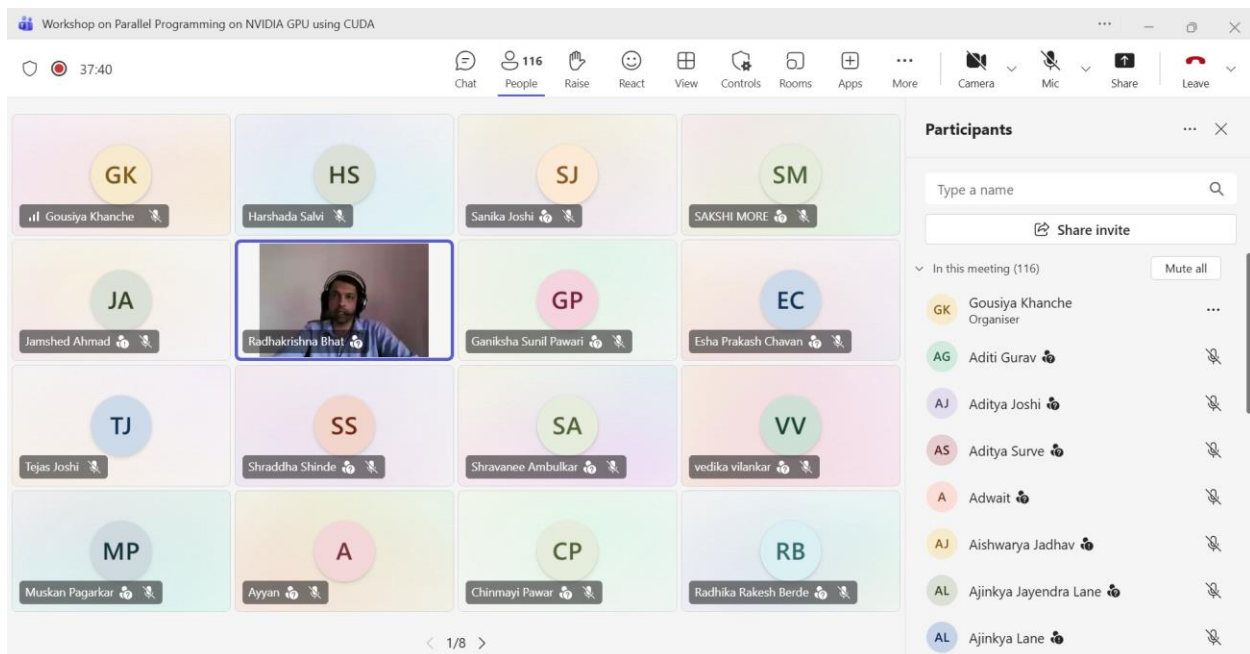
Prof. Harshada U. Salvi introduced the resource person, Dr. Radhakrishna Bhat, to the participants. **Dr. Radhakrishna Bhat** is an Associate Professor, School of Computer Engineering, Manipal Institute of Technology, Manipal. He received his Ph.D. from **Visvesvaraya Technological University, Belagavi**, and has more than **13 years of industry, academic, and research experience**. He has published more than **27 research papers** in reputed journals and conferences and has contributed as an editorial board member and reviewer for several reputed international journals. He received the **Outstanding Contributor Award in 2024 and 2025** from *Intelligent Decision Technologies*. He is also actively involved in various international conferences and is currently guiding Ph.D. scholars in areas including **Information Security, High-Performance Computing, and Federated Learning**.

The workshop covered important topics such as **Introduction to CUDA and Computational Patterns, Device Memory and Data Transfer, Atomic and Arithmetic Functions, Error Handling, CUDA Threads and Memory Organization, Vector–Vector Addition, Sequential and Parallel Sparse Matrix–Vector Multiplication using CSR, Tiled 1D Convolution, and Tiled Matrix–Matrix Multiplication Kernel**, along with hands-on practical sessions and demonstrations. The sessions provided participants with practical exposure to **GPU computing**,

CUDA programming, parallel algorithms, memory organization, and high-performance computing.

The workshop was smoothly coordinated by **Prof. Harshada U. Salvi** and **Prof. Gousiya D. Borkar**, whose dedicated efforts contributed to the successful execution of the event. The active participation of **140 participants** demonstrated the interest of students and faculty members in emerging technologies related to **GPU Programming, Parallel Computing, and High-Performance Computing**. Overall, the workshop was successfully conducted and provided participants with a valuable and enriching learning experience in parallel programming using NVIDIA GPU and CUDA.

Photographs



Active participation of students and faculty members

Workshop on Parallel Programming on NVIDIA GPU using CUDA

01:41:59

Pop out Chat People Raise React View Controls Rooms Apps More Camera Mic Share Leave

HS SJ SM JA Radhakrishna Bhat TJ PK GK

Shared Memory Message Packing

Participants

Type a name

Share invite

Waiting in lobby (1)

AV AAVEZA VASTA Unverified

In this meeting (131)

GK Gousiya Khanche Organiser

AG Aditi Gurav

AJ Aditya Joshi

AS Aditya Surve

A Adwait

AJ Aishwarya Jadhav

Dr. Radhakrishna Bhat delivering an insightful session on parallel programming using NVIDIA GPU and CUDA.

Workshop on Parallel Programming on NVIDIA GPU using CUDA

01:34:51

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TJ PJ SJ Radhakrishna Bhat GK SS HS

point-to-point Communication Example

```
#include <mpi.h> #include <stdio.h>

int main (int argc, char *argv[]) {

    int rank, size, my_number;

    MPI_Init (&argc, &argv);
    MPI_Comm_size(MPI_COMM_WORLD, &size);
    MPI_Comm_rank(MPI_COMM_WORLD, &rank);

    if(rank == 0){
        my_number = 777;
        MPI_Send(&my_number, 1, MPI_INT, 1, 0, MPI_COMM_WORLD);
    }
    else if (world_rank == 1) {
        MPI_Recv(&my_number, 1, MPI_INT, 0, 0, MPI_COMM_WORLD, MPI_STATUS_IGNORE);
        printf("Process 1 received number %d from process 0\n", my_number);
    }

    MPI_Finalize();

    return 0;
}
```

Meeting chat

Some people in this chat are outside your org. It's possible they have message-related policies that will apply to the chat. Learn more

Gaurav Chavan 14:29

SOHAM JOSHI 14:30

Rag Bole 14:35

Pavai G Jadhav 14:35

Microsoft Teams

Unverified Workshop on Parallel Pro...

PRATHAMESH JADHAV: Yes sir

Send a quick reply

Type a message

Students actively interacting through the meeting chat and sharing code outputs during the hands-on workshop session.