

# Centre for Development of Advanced Computing (Scientific Society of the Ministry of Electronics and Information Technology, Government of India)

## CERTIFICATE

This is to certify that

#### Raju Ranjan

has completed 900-hour full time Post Graduate Diploma course offered by

#### C-DAC's Advanced Computing Training School, Pune

This course has the following compulsory modules

- Programming Concepts
- Cloud Computing & Operations, Platforms & Deployment Strategies
- Computer Architecture & Interconnects and Intro to Processor & Co-processor Architectures
- Analytics & Statistics using Python and Numerical Methods in Science and Eng
- Linux shell scripting, Perl, and PHP
- General Aptitude & Communication

- Introduction to ML, DL and AI
- Introduction to CUDA Programming, OpenCL and OpenACC
- Intro to HPC Profiling, debugging tools, Schedulers & Job Submission
- Application Optimization, Resource Management & Monitoring tools
- Parallel Programming for Multicore
- Project

This course was conducted during the period September 15, 2022 to March 15, 2023. Raju Ranjan has been examined and found proficient in the above modules and has been conferred

#### PG Diploma in HPC Application Programming

with Grade B.

Grade Scale: A+ >=85%, A >=70% to <85%, B >=60% to <70%, C >=50% to <60%, D >=40% to <50%, F <40%

Col. A. K. Nath (Retd.)

Executive Director C-DAC, Pune

Associate Director & HoD

Risha P. R. Joint Director C-DAC ACTS, Pune

B351660

Date: March 15, 2023



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#### PG Diploma in HPC Application Programming

#### PERFORMANCE STATEMENT

(Duration: September 15, 2022 to March 15, 2023)

Name of the Student: Raju Ranjan

Name of the Centre : C-DAC's Advanced Computing Training School, Pune

Sr. No	Name of the Module	Maximum Marks	Marks Scored
1.	Programming Concepts	100	77
2.	Introduction to ML, DL and AI	100	56
3.	Linux shell scripting, Perl, and PHP	100	56
4.	Introduction to CUDA Programming, OpenCL and OpenACC	100	84
5.	Computer Architecture & Interconnects and Introduction to Processor & Co-processor Architectures	50	29
6.	Introduction to HPC Profiling, debugging tools, Application Optimization, Resource Management & Monitoring tools, Schedulers & Job Submission	100 0 /	72
7.	Cloud Computing & Operations, Platforms & Deployment Strategies	i00	63
8.	Analytics & Statistics using Python and Numerical Methods in Science and Engineering	100	63
9.	Parallel Programming for Multicore	100	65
	TOTAL	850	565

Marks Distribution: Theory 40%, Lab 40% and Internal 20%.

Result: Pass Grand Total: 565 / 850 Percentage: 66.47 % Grade: B

Raju Ranjan has been awarded Grade A for Project Work, Grade B for General Aptitude & Communication.

Grade Scale : A+>=85%, A>=70% to <85%, B>=60% to <70%, C>=50% to <60%, D>=40% to <50%, F <40%

Gaur Sunder

Associate Director & HoD C-DAC ACTS, Pune



Risha P. R. Joint Director C-DAC ACTS, Pune

M293070 Date: March 15, 2023