

Student Parallel Programming Challenge 2016 Supported by Intel and NVIDIA

December 19 - 22, 2016

CALL FOR PARTICIPATION

HiPC 2016 continues to host the **Student Parallel Programming challenge** to highlight the value of code parallelism, parallel algorithms, and the role of mathematics in solving real-world problems. The event will be geared towards providing students an introduction to parallel programming concepts, best practices, and implementations. We invite students and faculty enrolled in Indian institutes and universities to participate and submit their parallel solutions.

COMPETITION RULES

- The challenge will be open only to full-time students enrolled in **Indian institutions and universities.**
- Each team consists of 1 to 3 student participants and must be advised of a faculty advisor from their institution.
- ♦ A set of approved frameworks will be provided along with the challenge problem. Any submissions that do not follow the given guidelines will be disqualified.
- ♦ All submissions **must be team's own work**. Plagiarism will be dealt with utmost seriousness and will have serious consequences. We will follow the IEEE rules that apply to papers including adding authors to IEEE Prohibited Authors List Database. The decisions of track and program chairs in any such case will be final. All submissions will be vetted for plagiarism using MOSS MIT tool. Submissions which are found to be plagiarized will be rejected.
- Functional correctness of the result is a must to be considered for further evaluation.
- ◆ Scoring Metrics: Evaluation metrics will be made available along with challenge problem.

COMPETITION TRACKS

- The contest will be held in two parallel and independent tracks. First track will be for Intel KNL architecture based nodes and second track will consist of nodes with a NVIDIA GPU.
- ♦ Each team may choose to register for one or both tracks. No person can register for two teams in a single track.

MENTORSHIP PROGRAM

A team of experts in high performance computing and parallel programming will be available to the students to guide them through the process of building scalable, robust parallel solutions. All questions should be posted in a public forum visible to all the participating teams and no private conversations will be allowed. All teams should adhere to the forum guidelines and failure to do so will lead to disqualification

TRAINING SESSIONS

Both NVIDIA and Intel will host online training sessions for students, introducing the NVIDIA GPU and Intel KNL architecture respectively, along with the programming concepts, and development tools for each of the platforms. The sessions will be aimed towards providing an overview and development best practices for these systems.

PRIZES

The top three teams from *individual tracks* will be invited to the HiPC 2016 conference in Hyderabad, India where they will have the opportunity to present their approach and solutions and will receive following prizes.

First Prize : ₹ 30,000 or equivalent Second Prize : ₹ 20,000 or equivalent Third Prize : ₹ 10,000 or equivalent

IMPORTANT DATES		Intel KNL Track	NVIDIA GPU Track
Registration opens	>	Sep 12 th	Sep 12 th
Challenge problem release, Mentor forum opens	>	Sep 28 th	Sep 28 th
Online Training Session 1	>	Oct 7 rd	TBD
Online Training Session 2	>	TBD	TBD
Team given access to cluster for self evaluation	>	Oct 15 st	Oct 15 st
Final Submission Deadline	>	Oct 31 st	Oct 31 st
Final Notifications	>	Nov 15 th	Nov 15 th

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