Open applications for PRACE Summer of HPC 2017

Interested in spending your summer in Barcelona learning HPC?
Interested in spending your summer in Barcelona learning HPC? **PRACE Summer of HPC 2017** opens for applications from early-stage postgraduate and late-stage undergraduate students who are interested in spending July and August at BSC or another top HPC centre around Europe.

In the fifth edition of this programme, BSC will host two students. The research projects to be developed in Barcelona are:

<table>
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<th>Research Project</th>
<th>Mentor</th>
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<tr>
<td>Hybrid Monte Carlo Method for Matrix Computation on P100 GPUs</td>
<td>Vassil Alexandrov</td>
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<tr>
<td>Monte Carlo and Deep Learning Methods for Enhancing Crowd Simulation</td>
<td>Vassil Alexandrov, Isaac Rudomin</td>
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Monte Carlo methods usually create high level of parallelism, this combined with latest advances in Deep Learning is expected to enable very efficient solutions to the above problems and allow participating students to acquire highly sought skills needed to solve data and computationally intensive problems. Both students will learn to design parallel hybrid Monte Carlo methods. The students will learn how to implement these methods on modern computer architectures with latest NVIDIA P100 GPU accelerators as well as how to design and develop mixed MPI/OmpSs/CUDA code. Furthermore, these students will join a young and international team in an excellent environment. BSC offers the chance to further your professional career through various education and training programs.

To find out more about previous editions of this programme at BSC, see the videos below:

**PRACE Summer of HPC 2016**  **PRACE Summer HPC 2015**

**About the PRACE Summer of HPC**

The **PRACE Summer of HPC** is a PRACE outreach and training programme that offers summer placements at top HPC centres across Europe to late-stage undergraduates and early-stage postgraduate students. Up to twenty top applicants from across Europe will be selected to participate. Participants will spend two months working on projects related to PRACE technical or industrial work and produce a report and a visualisation or video of their results.

The programme will run from 1 July to 31 August 2017, with a kick-off training week attended by all participants. Flights, accommodation and a stipend will be provided to all successful applicants. Two prizes will be awarded to the participants who produce the best project and best embody the outreach spirit of the programme.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación