Call for Applications: EU-ASEAN High-Performance Computing Virtual School 2021: System Design and HPC Applications

The *EU-ASEAN High-Performance Computing (HPC) Virtual School 2021: System Design and HPC Applications* seeks 60 selected participants from ASEAN Member States to learn about the fundamentals of HPC design and applications to critical domains such as COVID-19, urgent computing and climate science from international luminaries from Europe, ASEAN and Japan through formal and practical courses. The virtual school is a hands-on virtual curriculum taught by foremost international experts in HPC technology and its applications to computational sciences. It is hosted by National Science and Technology Development Agency (NSTDA) Supercomputer Center (ThaiSC), Thailand.

This virtual school is carried out in the framework of the *Enhanced Regional EU-ASEAN Dialogue Instrument (E-READI)* programme*.* E-READI, a demand-driven instrument that supports ASEAN regional integration by strengthening EU-ASEAN networks and exchanging knowledge and experience in policy areas of joint interest. In addition to engaging with policy makers from EU and ASEAN institutions and Member States, it facilitates ongoing and new dialogues with civil society, the private sector, and other relevant stakeholders across various policy areas. It further strengthens the standing EU-ASEAN Dialogue Meeting on Science and Technology and the EU-ASEAN Strategic Partnership.

Background:

Since the identification of the need for a shared ASEAN HPC facility by the ASEAN HPC Task Force in 2018, a strong interest has been expressed in cooperating with European and international experts and profit from their experience in the sharing of regional resources, training capacities, and experience with HPC applications.

In this context, some ASEAN Member States students participated in the Association for Computing Machinery (ACM) summer school on HPC, and in December 2019, ASEAN experts followed a week-long training at the Barcelona Supercomputing Centre. This EU-ASEAN High-Performance Computing (HPC) School is the most recent practical follow-up, announced recently at the Supercomputing Asia conference's EU-ASEAN-Japan Symposium on 4 March 2021.

Programme and Application:

Over five days from 5 to 9 July 2021, the selected participants will receive tutorials on top supercomputer design and use such as on LUMI and Meluxina, new EuroHPC world-class supercomputers being deployed in the EU, and Riken Fugaku Japan, the number one supercomputer in the world. An introduction to the ASEAN shared HPC platform will be included. Practical applications will be covered with hands-on interactive modules. A discussion on the current trends and future evolution of HPC, including Quantum technology, will conclude the school.

By attending the school, the students will learn basic HPC design and programming skills to access local and international HPC platforms with proficiency. They will also gain exposure to international collaboration opportunities in an EU-ASEAN context. Students who complete all practical exercises will receive a digital certificate of participation. The top ten students ranked on the results of the practical exercises will receive a digital certificate of excellence and a guaranteed place in the next EU-ASEAN HPC School to be held in Bangkok, Thailand when conditions allow.

Please note that the programme and schedule is under local Bangkok time (GMT +7).

The following persons residing in ASEAN Member States (Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, or Viet Nam) are eligible:

- University students from undergraduates to post-docs in computing and computing application related disciplines
- Junior researchers, engineers
- Recent graduates in computing and computing application related disciplines

Required skills:

- Fundamental knowledge and experiences in Linux, editor (e.g. emacs) and programming by C-language
- Technical capabilities to attend online video sessions and to install several software and tools for hands-on classes before school starts (the installation guide will be available mid-June)

Application requirements:

- CV
- Letter of motivation
- Names of two former or current academic supervisors

Application deadline: 20 May 2021

To apply, visit: www.hpcschool.net

For any further inquiries, contact: info@hpcschool.net

The EU-ASEAN High-Performance Computing (HPC) School 2021: System Design and HPC Applications aims for diversity and encourages applications without discrimination of gender, disability, race, religion, or any other form of social exclusion.