ISC High Performance
The HPC Event.

ISC STEM STUDENT DAY & GALA

Wednesday, June 27, 2018

STEM STUDENT TOUR

ISC High Performance is a forum for high performance computing (HPC) community members to network and explore opportunities – for both current experts and future generations.

We have created a program to welcome science, technology, engineering, and mathematics (STEM) students into the world of HPC, demonstrate how technical skills in this area can propel your future career, introduce you to the current job landscape, and show you what the HPC workforce will look like in 2020 and beyond.

FIRST COME, FIRST SERVED

FREE ADMISSION FOR: undergraduate and graduate students (regional & international)

Opens on April 16, 2018!
We will close once we have reached 200 students. The tutorial can only accommodate 70 attendees, and these will be allocated to the earliest sign-ups.

WHY ATTEND THE ISC STEM DAY?

- ✓ If you choose a career in science, technology, engineering or mathematics, you will rely on HPC to support your work.

- ✓ Unfortunately, many STEM degree programs are not offering HPC courses in their curriculum.

- ✓ HPC is relevant in earth & climate science, clean energy, healthcare, food security, sustainable agriculture, marine research, biological research, cybersecurity & defense, urban planning, cosmology, astrophysics, machine learning, AI, Internet of Things, and more.

- ✓ Many HPC-related jobs in Europe and the U.S. are not being filled due to a shortage of HPC skills among science and engineering graduates.

- ✓ As Europe moves to become a digital economy beyond 2020, HPC skills shortage is expected to grow worse.

We offer you a **free introduction to HPC and its role in STEM careers**, which can provide a unique advantage over someone in a similar degree program.

While we do that, we would also like to introduce you to organizations that offer training in HPC, as well as those interested in hiring graduates.

In January 2018, the European Commission announced that it is going to spend EUR 1 billion on providing European researchers and companies world-class supercomputers by 2020, so they can develop new technologies for the 21st century.

Did you know that as a data scientist, computational chemist, computational biologist or senior software engineer, you can start out earning between EUR 64K to EUR 120K a year, depending on your qualifications and skills?

FULL PROGRAM

- ✓ Systematic introduction to HPC technology and its application
- ✓ 2 ½-hour tutorial on HPC, machine learning and data analytics
- ✓ Tour of the ISC 2018 exhibition
- ✓ Job fair
- ✓ Networking & dinner reception

In the tutorial, you will be introduced to major applications in the various fields of science and business, as well as an overview of systems and hardware needed to run those different applications.
You will also learn about the major programming languages used in this field before we move on to an introduction of machine learning and data analytics.

DURING THE DAY

Venue: Messe Frankfurt

9:30 am – 11:00 am	**Tutorial on HPC Applications, Systems & Programming Languages** (Presenter: Dr.-Ing. Bernd Mohr, Senior Scientist, Jülich Supercomputing Centre)
11:00 am – 11:30 am	Coffee break
11:30 am – 12:30 pm	**Tutorial on Machine Learning & Data Analytics** (Presenter: Dr.-Ing. Morris Riedel, Head of Research Group High Productivity Data Processing, Jülich Supercomputing Centre & Adjunct Associated Professor in high productivity processing of big data, School of Engineering and Natural Sciences, University of Iceland)
12:30 pm – 1:45 pm	Lunch
3:00 pm – 5:00 pm	**Guided Tour of ISC 2018 Exhibition**
5:15 pm – 5:30 pm	**Watch the Student Cluster Competition Awarding**
5:30 pm – 6:15 pm	**Attend Keynote on HPC Achievements & Impacts in 2018 by Dr. Thomas Sterling, Father of Beowulf Clusters**

Dr.-Ing. Bernd Mohr

Dr.-Ing. Morris Riedel

Dr. Thomas Sterling

DURING THE EVENING

Venue: Marriott Hotel, Frankfurt

7:00 pm – 7:20 pm	**Welcome & Introduction by Mr. Addison Snell** HPC Industry Analyst, Intersect360 Research
7:20 pm - 9:20 pm	**Dinner, Networking & Career Fair**

Mr. Addison Snell

Visit isc-hpc.com/stem-student-day-gala.html for additional information.