ISC 2021 DIGITAL SUMMARY

SHAPING TOMORROW

Bringing together 2,051 international attendees and 84 exhibitors, ISC 2021 Digital was undeniably the largest virtual community get together for high performance computing (HPC), machine learning (ML) and high performance data analytics (HPDA) in 2021.

This year's virtual format was well received and offered a high degree of interaction between conference attendees and exhibitors.

PROGRAM OVERVIEW

The 2021 program highlighted current developments in exascale computing, machine learning/AI, and cloud-based HPC, while also featuring discussions on emerging technologies such as quantum computing, neuromorphic computing, and next-generation HPC components. The growing confluence between traditional HPC, data-centric computing and machine learning/AI was a common theme across many presentations.

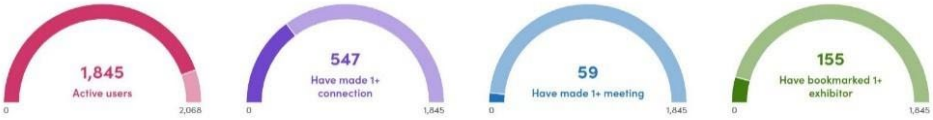
EVENT HIGHLIGHTS

- Daily Keynotes
- Distinguished Speaker Series
- TOP500 List - The 57th Edition
- Focus Sessions
- Vendor Showcase
- HPC & ML in Industry
- Student Cluster Competition

100 percent of surveyed attendees were either very satisfied or satisfied with the technical program. 50 percent of them said the selection of conference topics was excellent and 47 percent said they were very good.

ENGAGEMENT AT ISC 2021 DIGITAL

Given the interactive nature of the virtual platform, many attendees, speakers, and exhibitors used the opportunity to engage in conversations in real time, and close to 1,850 people used the platform actively during the duration of the conference. Breakout sessions, such as the ISC Hallway discussions, provided another way for attendees to talk with one another.



Source: ISC 2021 Digital platform

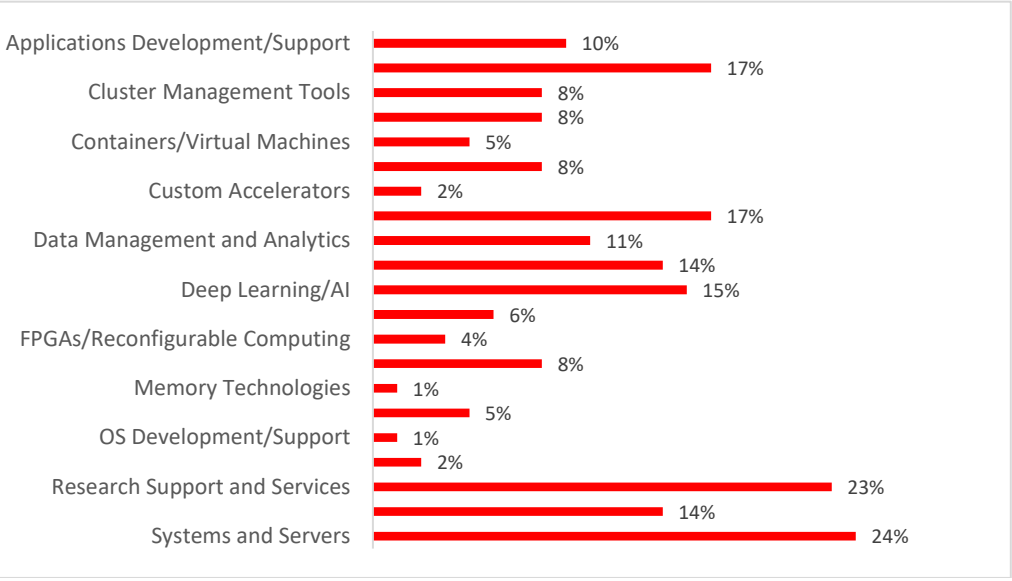
"Whatever #ISC21 organizers did in terms of its virtual event platform, everything is A+. This is the best online event platform I've used to date. From live to archive--clean, functional, and responsive," Nicole Hemsoth, Co-Editor at The Next Platform

"Totally agree with Nicole - and from an exhibitor perspective - the platform has been a huge success!" BeeGFS - The leading Parallel File System

EXHIBITION OVERVIEW

The ISC digital exhibition was filled with virtual booths and live demonstrations from 50 leading vendors and 30 research organizations and universities this year. Attendees were able to use the virtual platform to connect with exhibitors in real time.

EXHIBITOR CATEGORIES *(multiple choices)*



Source: ISC 2021 Digital registration data

ISC 2021 EVENT EVALUATION

Attendee Satisfaction with ISC 2021 Digital

Number of Events Attended in 2021

Comparing ISC 2021 With Those Events

Source: ISC 2021 Digital attendee survey

RECOGNIZING RESEARCH EXCELLENCE AT ISC 2021 DIGITAL

HANS MEUER AWARD

A Performance Analysis of Modern Parallel Programming Models Using a Compute-Bound Application, authored by Andrei Poenaru, Wei-Chen Lin and Simon McIntosh-Smith

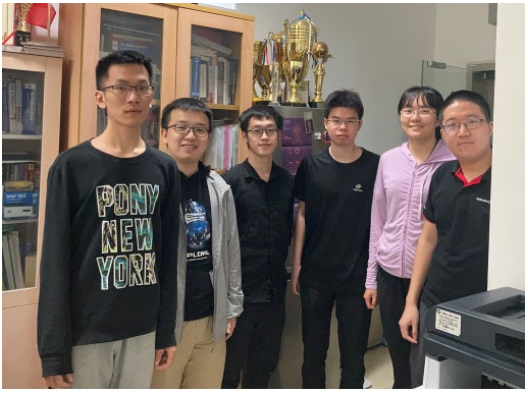
RESEARCH POSTER AWARD

Accurate Matrix Multiplication on Binary128 using Ozaki Scheme, authored by Daichi Mukunoki, Katsuhisa Ozaki, Takeshi Ogita, Toshiyuki Imamura

PHD FORUM AWARDS

- 1st Place: Noise-Driven Cluster-Level Performance Modelling and Engineering, authored by Ayesha Afzal, Georg Hager and Gerhard Wellein
- 2nd Place: The Best Thread Block Size and Other Parameters you have to tune for Optimal Performance on GPUs, authored by Dominik Ernst

STUDENT CLUSTER COMPETITION RESULTS



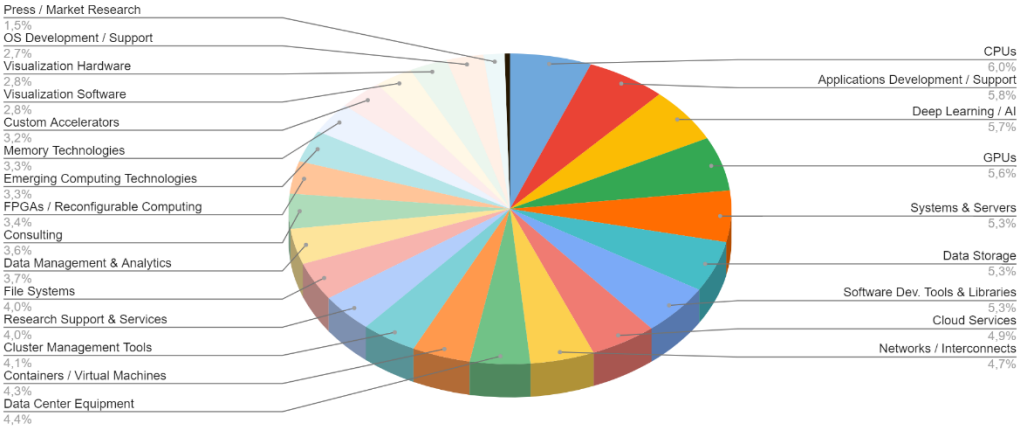
Diablo Team, Tsinghua University, China

- 1st Place Award: Diablo team, Tsinghua University, China
- 2nd Place Award: Supernova team, Nanyang Technological University (NTU), Singapore
- 3rd Place Award: Jinan team, Jinan University, China
- Honorable Mention: SYSU team, Sun Yat-Sen University (SYSU), China
- Highest LINPACK Performance Award: Tsinghua University, China
- Fan Favorite: NotOnlyFLOPs team, Universitat Politecnica de Catalunya (UPC), Spain

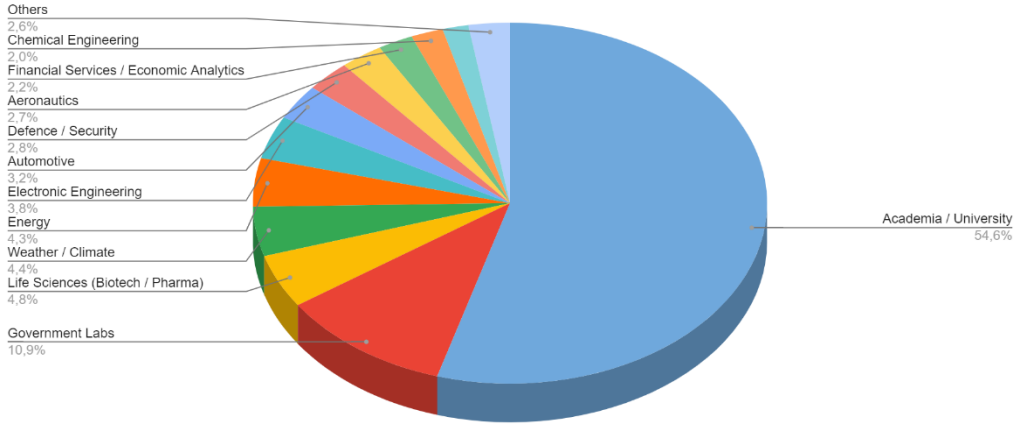
ATTENDEE DEMOGRAPHICS

ISC 2021 Digital attracted 2,051 attendees from June 24 – July 2. Out of these numbers, 50,5 percent of the attendees considered themselves as HPC providers, 30.04 percent were HPC users and 11.48 percent said they were from other sectors.

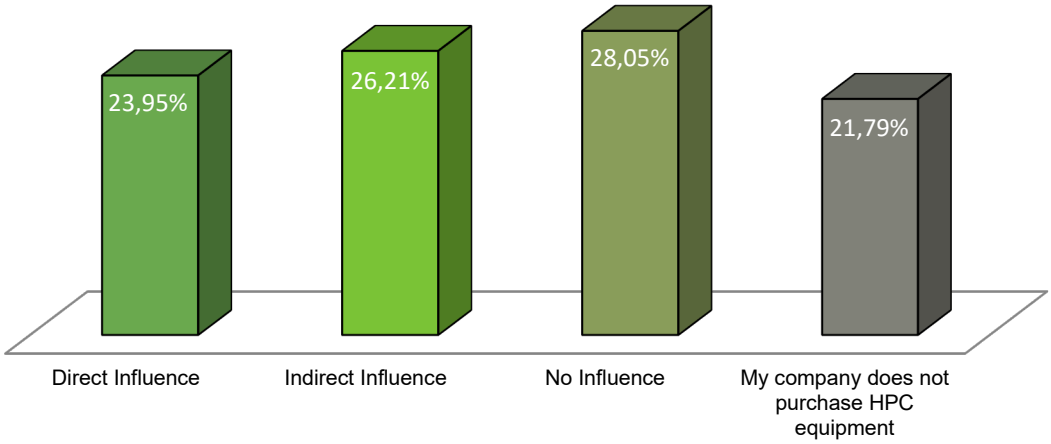
HPC PROVIDERS



HPC USERS

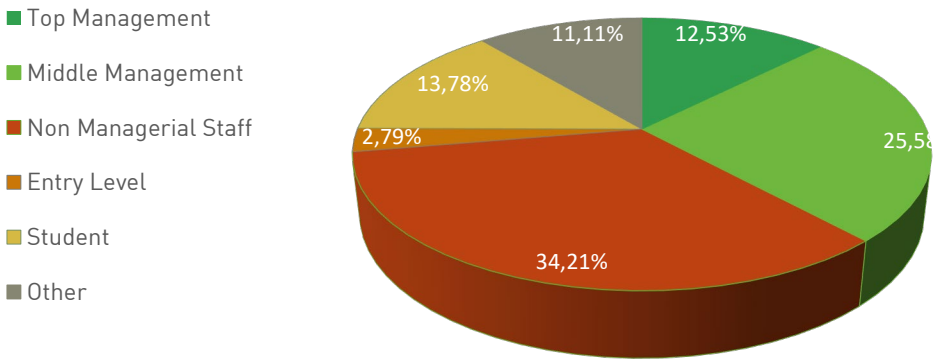


PURCHASING AUTHORITY



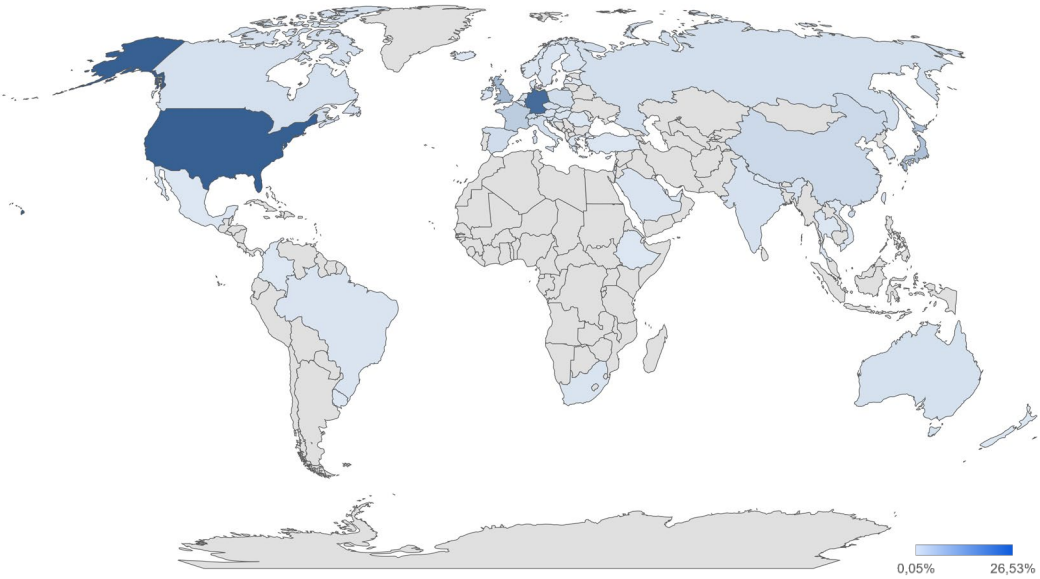
Source: ISC 2021 Digital registration data

PROFESSIONAL ACTIVITIES



Source: ISC 2021 Digital registration data

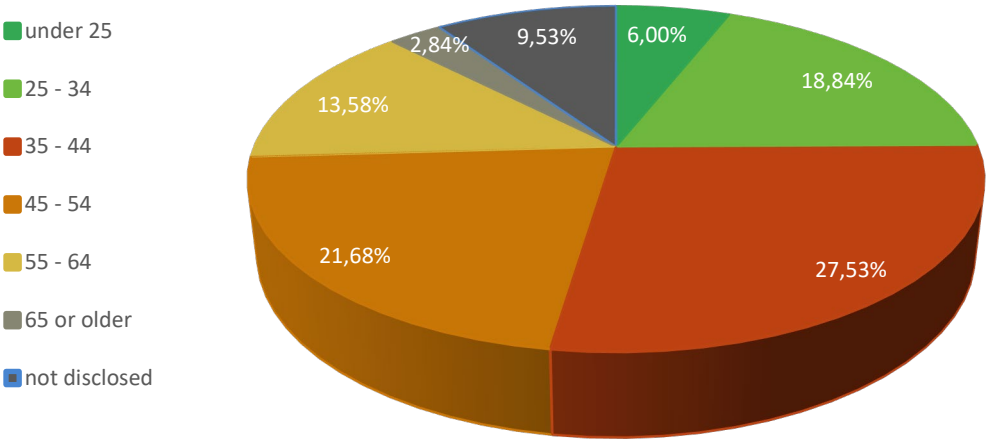
ATTENDEES BY COUNTRIES



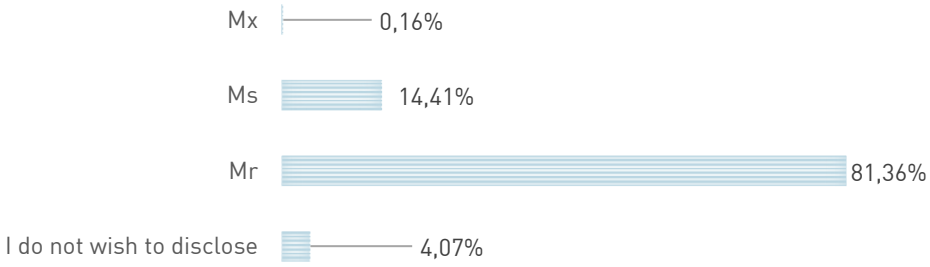
Countries		Netherlands	1,27%	Israel	0,42%	Qatar	0,11%
USA	26,53%	Canada	1,22%	Sweden	0,42%	Latvia	0,11%
Germany	24,10%	Singapore	1,16%	Greece	0,37%	Uruguay	0,11%
UK	8,99%	Australia	1,11%	Saudi Arabia	0,37%	Colombia	0,11%
Japan	7,61%	India	0,95%	Hungary	0,37%	Mexico	0,05%
France	5,07%	Taiwan	0,79%	Norway	0,26%	Cyprus	0,05%
China	2,64%	Finland	0,74%	Turkey	0,26%	Romania	0,05%
Spain	1,96%	Belgium	0,69%	Slovakia	0,21%	Nepal	0,05%
Switzerland	1,90%	South Korea	0,69%	Slovenia	0,21%	Croatia	0,05%
Poland	1,85%	South Africa	0,53%	Luxembourg	0,21%	Iceland	0,05%
Italy	1,69%	Brazil	0,42%	Denmark	0,16%	Vietnam	0,05%
Russia	1,43%	Ireland	0,42%	N. Zealand	0,11%	UAE	0,05%
Czech Rep.	1,43%	Austria	0,42%	Thailand	0,11%	Ethiopia	0,05%

Source: ISC 2021 Digital registration data

ATTENDEE AGE BREAKDOWN



ATTENDEE GENDER



Source: ISC 2021 Digital registration data

REASONS FOR ATTENDING

Information is based on voluntary feedback during registration.

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