SC22 2022

HPC Accelerates

2022

2022 Chair
Candace Cuthane
Dallas, TX

2022

11,830 Attendees

A Return to In-Person
After two years of virtual and hybrid events, SC is delighted to see the vast majority of the HPC community attend SC in person.

Digital Experience
SC22 launches its proprietary remote participation platform, the Digital Experience. It serves 1,500 remote attendees, with access included for all in-person registrations.

ACM A.M. Turing Award Lecture
Jack Dongarra chooses SC22 as the location for delivering his lecture, replacing the traditional Keynote at SC.

Students@SC
Preparing students and those early in their careers, Students@SC offers a robust program including Student Volunteers, the Student Cluster Competition, IndySCC, HPC Immersion, Guided Interest Groups, and more.

Top Ten Supercomputers
(Via TOP500 List, November 2022)

Frontier
Fugaku
LUMI
Leonardo
Summit

Test of Time Award
SC05 Paper: A Power-Aware Run-Time System for High-Performance Computing
Authors: Chung-hsing Hsu, Wuchun Feng

Gordon Bell Prize
Pushing the Frontier in the Design of Laser-Based Electron Accelerators with Groundbreaking Mesh-Refined Particle-In-Cell Simulations on Exascale-Class Supercomputers
Authors: Luca Fedeli, Thomas Clark, Neil Zaim, Henri Vincent, Jiaxu Hu, Kevin Goll, Remi Lehe, Andrew Myers, Weijun Zhang, Jean-Luc Vay, Conrad Hillairet, Jean Baptiste Leblanc, Christelle Piechurski, Mitsuhisa Sato

ACM Gordon Bell Special Prize for High Performance Computing-Based COVID-19 Research
GenSLMs: Genome-Scale Language Models Reveal SARS-CoV-2 Evolutionary Dynamics

Best Paper Award
ProbGraph: High-Performance and High-Accuracy Graph Mining with Probabilistic Set Representations
Authors: Maciej Besta, Cesare Miglioli, Paolo Sylos Labini, Jakub Tětek, Patrick Iff, Raghavendra Kanakagiri, Saleh Ashkboos, Kacper Janda, Michal Podstawa, Grzegorz Kwasniewski, Niels Gleinig, Flavio Vella, Onur Mutlu, Torsten Hoefler

Plenary Sessions
ACM A.M. Turing Award Lecture
Speaker: Jack Dongarra
HPC Accelerates Plenary: The Many Dimensions of HPC Acceleration
Moderator: Addison Snell
Panelists: Jim Cherry, Subhro Sengupta, Georgia (Gina) Tourassi

SCinet Network Architecture
More than 175 volunteers representing 80 companies and organizations planned, built, and operated SCinet:
- 37 miles of fiber optic cable installed
- 5.01 terabits per second of wide area network capacity delivered
- WiFi 6 delivered throughout the convention center for the first time