Argonne NATIONAL LABORATORY

ARGONNE TRAINING PROGRAM ON EXTREME-SCALE COMPUTING (ATPESC)

ATPESC 2021

AUGUST 1–13

Intensive two-week training on the key skills, approaches, and tools to design, implement, and execute Computational Science and Engineering (CSE) applications on current and next-generation supercomputers.

PROGRAM CURRICULUM

Renowned computer scientists and high-performance computing (HPC) experts from U.S. National Laboratories, Universities, and Industry serve as lecturers and effectively guide hands-on training sessions.

ATPESC participants will be granted access to **U.S. Department of Energy (DOE) Office of Science User Facilities,** which are home to some of the world's most powerful supercomputers, including upcoming exascale systems.

The core curriculum includes:

- Computer architectures and predicted evolution
- Numerical algorithms and mathematical software
- Approaches to building community codes for HPC systems
- Data analysis, visualization, I/O, and methodologies and tools for big data applications
- Performance measurement and debugging tools
- Machine learning and data science

COST

There are no fees to participate. Domestic airfare, meals, and lodging are provided.

ELIGIBILITY

Doctoral students, postdocs, and computational scientists are encouraged to submit applications. Visit the website for eligibility details.

APPLICATION

The program provides **advanced training to 70 participants.**

Qualified applicants must have:

- Substantial experience in MPI and/or OpenMP programming,
- Used at least one HPC system for a complex application, and
- Plans to conduct CSE research on large-scale computers.

The call for applications for ATPESC 2020 is now open. **Applications are due March 1, 2021.**

TO APPLY

extremecomputingtraining.anl.gov

SPONSORS

ATPESC is funded by the Exascale Computing Project, a collaborative effort of the DOE Office of Science's Advanced Scientific Computing Research Program and the National Nuclear Security Administration.

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U.S. DEPARTMENT OF ENERGY

National Nuclear Security Administration

ECP EXASCALE COMPUTING PROJECT

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