www.anl.gov

Argonne NATIONAL LABORATORY

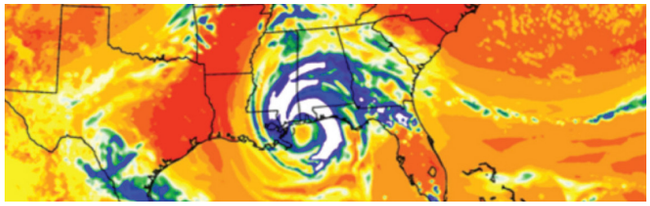
COMPUTING TO SOLVE THE SCIENCE QUESTIONS THAT IMPACT OUR LIVES

Argonne National Laboratory is home to world-leading experts and resources — including some of the most powerful computers in the world.

At Argonne, high-performance computing (HPC) — modeling, artificial intelligence, data and computational science — forms the backbone of our research. Our computing expertise also extends beyond HPC to include distributed/edge computing, high-speed networking, cybersecurity, and quantum computing.

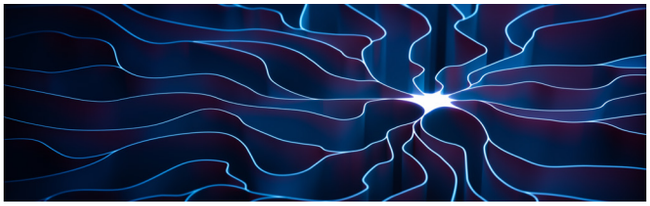
Leadership Computing

At the Argonne Leadership Computing Facility, supercomputing resources and expertise accelerate the pace of discovery in a broad range of disciplines. Argonne's next-generation supercomputer, Aurora, will be one of the nation's first exascale systems when it is delivered in 2021. Designed in collaboration with Intel and Cray, Aurora will complete a quintillion calculations per second, helping ensure continued U.S. leadership in high-performance computing for scientific research.



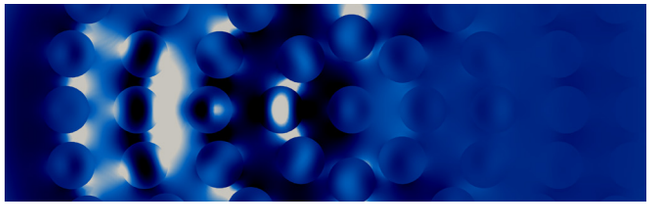
Computational Science

In the computational science program at Argonne, researchers address some of the most pressing issues in natural science. Physics-based climate models help us predict future climate. Catalysis studies employ computational chemistry to improve industrial processes. Simulations show us how drugs are delivered in the human body, and modeling of beam physics will lead to a brighter storage ring for Argonne's Advanced Photon Source.



AI and Data Science

Argonne is advancing artificial intelligence (AI) to address critical challenges in science, technology, and medicine. AI enables computers to learn, recognize patterns, solve problems, explore complex datasets, and adapt to changing conditions. Argonne researchers continue to evolve and advance existing AI methods, such as deep learning, coupling them with next-generation supercomputers like Aurora to accelerate the pace of scientific discovery.



Mathematics and Computer Science

Argonne is a leader in mathematics and computing sciences, developing algorithms and software for powerful computer systems that enable scientists to tackle problems that would have been unthinkable just a few years ago. We focus on developing technologies for future extreme-scale computers that can handle the massive data sets, increased failure rates, and power management needs of these systems.

"I worked in the financial industry for many years; for me, the exploration of knowledge with our computers is what sets Argonne apart. As someone with cerebral palsy, it's also heartening for me to see people like me — with differing abilities and perspectives — contributing to the amazing science happening here."

***Ben Lenard** is an HPC Systems and Database Administrator who helps keep Argonne's big machines running and manages various databases*

"The facilities available in national laboratories are one of a kind. The expertise of our scientists is amazing, and their passion for their work is inspiring."

***Marta Garcia Martinez** is a Computational Scientist who works with multidisciplinary research teams to get the most out of leadership-class computing systems*

"National laboratories provide an environment where the world's top scientists can collaborate on problems of global importance. The projects tend to be longer lasting and wider in scope than those at other research institutions, enabling cross-disciplinary interactions within and between the laboratories."

***Misun Min** is a Computational Scientist who develops scalable algorithms and software for high-performance computing architectures*

"The difference in scale between university and national laboratory facilities is profound. Here, we build systems and infrastructure far beyond the capabilities of individual research organizations, enabling researchers to ask questions many orders of magnitude larger than what can be done on their own."

***Carissa Holohan** is a Principal Network Administrator, maintaining the network interconnects to move data between computers, storage systems, and the outside world*

No matter what field you're in, at Argonne you will work with some of the world's best researchers at the leading edge of computing to solve problems that are important to the nation and the world.

WHAT DO WE OFFER?

Our diverse and dynamic research agenda spans 16 research divisions and five national user facilities. This rich scientific environment provides our researchers and visitors with an extraordinary range of cutting-edge facilities and scientific tools that support in-depth research, drive technological breakthroughs, and improve our nation's competitiveness and quality of life.

The laboratory offers a number of fellowships and computing-specific student opportunities, including the Margaret Butler Fellowship in Computational Science, the Wilkinson Fellowship in Scientific Computing, and the Maria Goeppert Mayer Fellowship. For the full list, visit **www.anl.gov/hr/argonne-fellowship-opportunities**.

WORKING AT ARGONNE

At Argonne, our scientists and engineers are finding creative ways to prepare the world for a better future. The work is both challenging and fulfilling, and we strive to create an environment where our employees feel secure, valued, and respected. With competitive pay, wellness programs, and a stimulating and attractive work environment, Argonne is a tremendous place to work.

INTEGRATING LIFE AND CAREER

Integrating work and life means prioritizing what is important to you. Argonne supports employees who want to coordinate work, home, and community activities — offering onsite childcare, flexible work schedules, generous vacation programs, and much more.

GROWING YOUR CAREER

As an employee at Argonne, you can grow your career through education, mentoring, and leadership development. We encourage life-long learning and goal setting to ensure that you can go as far as your hard work and creativity take you.

LIVING OUR VALUES

At Argonne, our core values — Impact, Safety, Respect, Integrity, and Teamwork — guide us in maintaining a safe, inclusive, and diverse environment in which our employees and partners can thrive. Whatever your role — scientist, engineer, or support staff — there is a path for you at Argonne.

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ARGONNE NATIONAL LABORATORY

- U.S. Department of Energy research facility
- Operated by the University of Chicago
- Midwest's largest federally funded R&D facility
- Located in Lemont, IL, about 25 miles (40 km) southwest of Chicago, IL (USA)
- Conducts basic and applied research in dozens of fields
- Unique suite of leading-edge and rare scientific user facilities

CONTACT

Argonne Careers
Phone: 630-252-2336
E-mail: careers@anl.gov
www.anl.gov/careers

U.S. DEPARTMENT OF ENERGY

Argonne National Laboratory is a U.S. Department of Energy laboratory managed by UChicago Argonne, LLC.

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