



LEAP

LEARNING THE EARTH WITH
ARTIFICIAL INTELLIGENCE AND PHYSICS

YEAR 2 ANNUAL MEETING

JANUARY 17 - 18, 2023
EDITH MACY CENTER || BRIARCLIFF MANOR, NY

LEAP Education Programs

Building the Momentum to LEAP

LEAP Education Activities

- ❑ LEAP Curriculum
 - ❑ Machine Learning (ML) for Environmental Engineering and Science (Gentine)
 - ❑ Readings in Climate Data Science (Zheng/Elsaesser)
 - ❑ Doctoral students; research skills; convergence
 - ❑ Connection with LEAP Lectures/Seminar talks
 - ❑ Climate prediction challenges (McKinley/Zheng)
 - ❑ Project-based learning
- ❑ LEAP Bootcamps (Abernathey/Gentine/Busecke)
 - ❑ Intensive informal workshops on Climate Data Science
 - ❑ Train the trainers
- ❑ LEAP Certificate ⇒ Online micro-credential (under planning)

LEAP Education Activities

- ❑ LEAP REU
 - ❑ Research experiences for undergraduates
 - ❑ Broadening participation
- ❑ LEAP Summer Momentum Fellows
 - ❑ PhD students from data science doing a research intern with LEAP
- ❑ LEAP Summer Institute for K-12 teachers (summer 2023)

We Want You!



What do we want you for?

- ❑ Be your brilliant self!
- ❑ Participate in things that you care about
- ❑ Activities that can benefit your research

What do we want you for?

- ❑ Co-design prediction challenges based on LEAP research
 - ❑ ML instructors: hosting
 - ❑ Climate researchers: guest speaker and mentoring
- ❑ Research projects for REU students and Momentum Fellows
 - ❑ Research experiences for REU students
 - ❑ Research immersion for PhD fellows
- ❑ Participate in summer institutes and other KT activities

We want to make it “easy” for you

- ❑ Design Studio Interns to help with curricular development
- ❑ LEAP-Pangeo team helps with data and computing
- ❑ Education team helps with logistics

Research outcomes from education activities

- ❑ Exploratorion of ideas
- ❑ Recruitment of talents
- ❑ Communication and interpretation skills

Questions?