

Distinguished Lecturers



Jack Xiong

PhD, Instrument Calibration Expert (NASA-retired)



Steve Platnick

PhD, Visible/Near Infrared Imagery Expert -Clouds/ Aerosols (NASA-retired)



Tony McNally

PhD, Head of Earth System Assimilation, ECMWF



Maria Tzortziou

PhD, Ocean Ecology & Biogeochemistry Expert, CCNY



Christian Kummerow

PhD, Microwave RS Expert, Colorado State University



Bojan Bojkov

PhD, Head of the EUMETSAT Remote Sensing & Product Division



Allen Huang

PhD, Infrared RS Expert, University of Wisconsin, Madison



Shobha Kondragunta

PhD, Air Quality Remote Sensing Expert, NOAA



Ken Holmlund

PhD, Earth Observing Systems Expert, Retired WMO Space Program Chief & EUMETSAT Chief Scientist



Kyle McDonald

PhD, Synthetic Aperture Radar (SAR) Expert, CCNY



Laura Alvarez

PhD, Expert in ML Models & Autonomous Systems Technology for Enhancing Computational Fluid Dunamic Models, UTEP



Alex Gilerson

PhD, Ocean Remote Sensing Expert, CCNY



Hernan Moreno

PhD, ML Expert in Hydrology and GeoAI, UTEP



Dan Lindsay

PhD, Expert in Imagery Nowcasting Applications, NOAA



UNU Hub

Remote-Sensing & Sustainable Innovations for Resilient Urbai Systems (R-SIRUS)

About the Workshop

The United Nations University Hub R-SIRUS, Remote Sensing and Sustainable Innovations for Resilient Urban Systems, is pleased to announce the launch of its Professional Development Workshop in Digital Earth and Artificial Intelligence for Sustainability.

This unique workshop offers participants an opportunity to develop cutting-edge skills at the intersection of remote sensing, geospatial technologies, artificial intelligence, and sustainable development. It is designed for professionals, researchers, and policymakers looking to harness digital innovation for global sustainability challenges.

This five-day micro-credential workshop provides hands-on training in Earth remote sensing and artificial intelligence/machine learning (AI/ML) for forecasting and policy support. Participants will gain experience working with satellite data, applying machine learning techniques, and building reproducible workflows using Python and open science datasets. The program culminates in a capstone project designed to deliver real-world impact

INTERESTED? SIGN UP











United Nations University Hub R-SIRUS

Professional Development Workshop in

Digital Earth and Artificial Intelligence for Sustainability

January 12-16, 2026

9:00 AM-5:00 PM EST The City College of New York

Certificate awarded at completion





Who Should Apply?

Professionals and advanced students from:

- Government agencies and NGOs
- Research institutions and universities
- International organizations
- Private sector engaged in environmental tech or AI



Registration Fees

| Early Access | In-person | Online |
|---------------------|-----------|--------|
| before Dec. 1, 2025 | \$400 | \$250 |
| General Access | In-person | Online |
| before Jan. 1, 2026 | \$500 | \$350 |
| Onsite | In-person | Online |
| Start Day | \$600 | \$400 |



Remote-Sensing & Sustainable Innovations for Resilient Urban Systems (R-SIRUS)

Learning Outcomes

- Learn core Earth Remote Sensing (RS) systems
- Apply AI/ML to forecasting & realworld decision support
- Gain familiarity with diverse Earth Observation (EO) datasets
- Panel forums for engaged discussions
- Networking with global experts



Stay Connected via LinkedIn



Workshop Structure



Lecture Format - Day 1-2

EO Systems, Remote Sensing Theory, Products/Applications:

- Temperature, Water Vapor, Clouds, Aerosols, Vegetation
- Ocean Color, Surface Temperatures, Snow/Ice, Ozone
- Precipitation, Flooding, Nowcasting Imagery, Wildfires
- Situational Awareness, Decision Support, Risk Analysis, Disaster Management



Hands On (AI/ML) - Day 3-5

AI/ML for Geoscience, **Environmental Data Science**, **Forecasting**

• Coding labs & Model validation + reproducibility best practices

Open Science Platforms

• Building shareable workflows & research with open datasets

Applications in disaster risk reduction

Flooding and urban heat