
Job Title	Research Associate
PVN ID	NY-2511-007111
Category	Research
Location	NYC COLLEGE OF TECHNOLOGY

Department

Status	Full Time
Annual Salary	\$65,000.00 - \$72,000.00
Hour(s) a Week	35
Closing Date	Jan 13, 2026 (Or Until Filled)

General Description

The Environmental Science Program at the New York City College of Technology (CUNY), in collaboration with the Research Foundation of the City University of New York (RFCUNY), seeks a highly motivated Postdoctoral Research Associate to join an interdisciplinary research team focused on aquatic remote sensing and machine learning. The successful candidate will develop and apply advanced computational and remote-sensing approaches to study water-quality parameters and physical properties of inland aquatic systems using both satellite and drone-based imagery.

This position supports a collaborative research effort involving City Tech and external partner institutions. The project integrates multi-sensor data from satellites (e.g., Landsat, Sentinel-2) and unmanned aerial vehicles (UAVs) to improve understanding of how surface-water characteristics vary in response to climatic, geomorphological, and ecological factors. Research activities include the development and validation of methods for extracting and analyzing surface temperature, optical water-quality indicators, and other physical parameters, as well as the application of machine-learning tools for spatiotemporal analysis.

The Postdoctoral Research Associate will also contribute to data integration, quality assurance procedures (QAPP/DUAR standards), and scholarly dissemination through peer-reviewed publications, technical reports, and conference presentations.

Other Duties

- Conduct research applying remote sensing, drone image analysis, and machine learning to assess water quality parameters and physical properties of lakes and reservoirs.
- Develop, refine, and test computational workflows for processing and integrating multi-sensor datasets from satellite and UAV platforms.
- Implement and document quality-assurance procedures and validation protocols for environmental datasets.

- Prepare and submit manuscripts, progress reports, and conference presentations.
- Collaborate with faculty, students, and partner institutions on data synthesis and dissemination.
- Mentor undergraduate or graduate student researchers and contribute to proposal development for future research initiatives.

Additional Information

- Start Date: December 1, 2025
- Appointment Duration: One year (through November 30, 2026), renewable contingent upon performance and funding availability.
- Worksite: New York City College of Technology, Brooklyn, NY
- Expected Travel: Occasional travel (1–2 times per year) to research meetings or scientific conferences.

Other Duties

- Engage with the CUNY research community to support interdisciplinary collaboration.
- Assist with data curation, management, and documentation for consortium use.
- Perform other related duties as assigned.

Qualifications

Minimum Qualifications:

- Ph.D. in Environmental Science, Remote Sensing, or a closely related field (awarded by start date).
- Demonstrated experience with satellite or drone remote sensing for environmental or aquatic systems.
- Proficiency in scientific programming (Python, R, or equivalent).
- Knowledge of machine-learning methods applied to environmental or geospatial data.
- Excellent writing, analytical, and communication skills, with a record of scholarly publications.

Preferred Qualifications:

- Experience with Python-based cloud computing or high-performance computing environments.
- Background in hydrology, limnology, or biogeochemistry.
- Experience mentoring students and working within interdisciplinary research teams.
- Ability to travel and present research at professional conferences.