
Job Title	Energy Codes Research Intern
PVN ID	VA-2205-004798
Category	Research
Location	OFFICE OF SR. UNIV DEAN FOR ACADEMIC AFFAIRS
Department	CUNY Building Performance Lab
Status	Part Time
Hourly Rate	\$16.00-\$18.00
Hour(s) a Week	0.00
Closing Date	Jul 19, 2022 (Or Until Filled)

General Description

Organizational Description:

The CUNY Building Performance Lab (CUNY BPL) provides mission-critical support to the Department of Citywide Administrative Services' Division of Energy Management (DEM) and its client agencies for implementing New York City's ambitious climate and clean energy policies. CUNY BPL staff have expertise in a wide range of areas related to building systems, operations and data, and the design and construction process. This includes: energy data analytics (monthly and real-time meter data); building energy modeling (EnergyPlus and others); measurement and verification (IPMVP and ASHRAE protocols); HVAC systems; building controls; data acquisition (via BAS or field equipment); and operational improvements via Pacific Northwest National Lab's Building Re-tuning protocol. The organization works collaboratively with industry professionals, other research institutions, and several of the US DOE's National Labs; and is a participating member of the Center for Building Energy Smart Technologies (BEST), an Industry-University Cooperative Research Center funded by the National Science Foundation (NSF) (https://www.nsf.gov/awardsearch/showAward?AWD_ID=2113874) in city-scale building energy systems and informatics. CUNY BPL also runs an extensive internship program for CUNY students that provides real world experience and hands-on work in each of the organization's program areas.

General Description:

CUNY Building Performance Lab (BPL) leading a collaborative research project with the US Department of Energy, the NYC Mayor's Office of Climate and Environmental Justice and the NYC Department of Buildings to further the state of the art in understanding how actual building energy and greenhouse gas (GHG) emissions performance can be measured and predicted, how measurements compare to prescriptive or simulation based energy code targets, and to characterize building energy technologies.

Other Duties

The major work areas that will be undertaken are:

- Collect and aggregate building and energy data from public sources and catalog that data with respect to prescriptive or performance energy codes in place at the time of permitting;
- Access and use proprietary data under NYC interagency agreements to analyze building energy consumption through EPA Portfolio Manager benchmarking data, DOE Audit Template, and regression models;
- Analyze how building automation system data can be used to predict and document GHG emissions for commercial buildings; and
- Develop a stretch standard of care for existing and new building automation systems that allows building owners to predict and analyze their greenhouse gas emissions.

Qualifications

Prefer major in or degree program with progression to: Architecture; Architectural Engineering; Computer Science; Data Science; Mathematics; Mechanical Engineering; Computer Programming & Software Development; Engineering Science – Mechanical; Construction Management; Environmental Controls.

Fluent in written and spoken English, understanding of construction terminology, database, programming (Python) and data science skills.