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Downloaded On: Aug. 20, 2025 8:43pm Posted Aug. 20, 2025, set to expire Dec. 20, 2025

Job Title Postdoctoral Associate in Urban Science/Complex

systems

Department Mechanical and Aerospace Engineering - Biomedical

Engineering

https://engineering.nyu.edu/research-

innovation/centers/cusp

Institution New York University

Brooklyn, New York

Date Posted Aug. 20, 2025

Application Deadline Open until filled

Position Start Date Fall 2025

Job Categories Post-Doc

Academic Field(s) Statistics & Actuarial Science

Physics - General

Mathematics/Applied Mathematics

Industrial Design/Technology
Computer/Information Sciences

Sciences - General

Apply By Email <u>mporfiri@nyu.edu</u>

Job Description

Multiple post-doc positions are available in the <u>Dynamical Systems Laboratory (DSL)</u> at the Center for Urban Science and Progress, Tandon School of Engineering, New York University, in a wide variety of research projects that are signature scopes of our multidisciplinary research group. The positions are fully funded with a competitive salary.



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We seek independent, motivated, and creative individuals to conduct fundamental research in **the theory and application of complex systems**. Candidates will make important contributions to one or multiple research projects supported by our several ongoing grants (see DSL: Active Projects). In particular, our research at CUSP seeks to elucidate the causes of firearm-related harms in cities, understand human mobility patterns on different scales (such as commuting and migration), develop robotic-based assistive technologies for the visually impaired to navigate urban environments, and assist communities in the aftermath of natural disasters through bio-inspired solutions.

We are seeking individuals with a **strong background in mathematical modeling, data science, and/or experimental methods**. Ideal candidates should have a demonstrated interest in working on interdisciplinary research topics, bringing technical depth to a collaborative, multidisciplinary environment. Whether working on criminology, mobility, health, or disaster-related research, candidates should thrive in quantitative, hypothesis-driven research with high impact.

Beyond conducting fundamental research in the broad area of urban science, candidates will be responsible for mentoring undergraduate, master's, and doctoral students, leading outreach activities, and supporting proposal writing and grantsmanship.

Candidate profile

Ideal candidates are expected to have:

- i) the drive to pursue an excellent career in research upon completion of their post-doc training;
- ii) a Ph.D. in engineering, mathematics, physics, or related fields;
- iii) a demonstrated ability to conduct original research (theoretical, experimental, or computational), as evidenced by a number of high-quality journal and conference publications;
- iv) outstanding English language oral and written communication skills;
- v) a strong work ethic with the ability to work independently as well as in a research group;
- vi) evidence of good project/laboratory management skills;
- vii) the ability to strategize the goals of projects as well as design, conduct, and interpret experiments,



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under the mentorship of the Principal Investigator; and

viii) a strong interest in becoming a leader, conducting interdisciplinary research with collaborators in other fields, and mentoring students

The DSL was established seventeen years ago by Prof. Maurizio Porfiri (Institute Professor at Tandon School of Engineering and Director of the Center for Urban Science and Progress, with appointments at the Department of Mechanical and Aerospace Engineering, the Department of Biomedical Engineering, the Department of Civil and Urban Engineering, and the Center for Urban Science and Progress). The DSL is home to a highly collaborative and vibrant group of young scholars with complementary expertise across theory, experiments, and computations. The director, Prof. Porfiri, is the author of more than 400 journal publications and the recipient of numerous professional awards (Wikipedia/Maurizio_Porfiri).

Application

Candidates are encouraged to contact Prof. Porfiri via email: mporfiri@nyu.edu. Candidates should include a detailed curriculum vitae, a one-page cover letter, a statement of past research experience, and a list of references. The cover letter should include applicants' research interests, and their future plans, both in general and research-wise. Review of applications will begin immediately, and candidates are expected to join as early as Fall 2025.

In compliance with NYC's Pay Transparency Act, the annual base salary for this position is \$64,063. New York University considers factors such as (but not limited to) the specific grant funding and the terms of the research grant when extending an offer.

EEO/AA Policy



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Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact Maurizio Porfiri

Mechanical and Aerospace Engineering - Biomedical

Engineering

New York University

Brooklyn, NY

Contact E-mail mporfiri@nyu.edu