



CENTER FOR SMART
STREET
SCAPES

Research Experience for Teachers (RET)

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Overview

The CS3 Research Experience for Teachers (RET) program provides K–12 STEM educators with a unique opportunity to engage in hands-on research focused on smart streetscapes. Participants collaborate closely with CS3 researchers from Columbia University and Lehman College, gaining exposure to emerging artificial intelligence (AI) approaches and exploring how

data-driven technologies can enhance urban life across New York City.

Research activities will span a range of interconnected areas, including computer vision, urban data collection, and statistical analysis of street-level interventions. Participants will also explore how recent advances in generative AI can support research and analysis workflows.

In addition to their research experience, participants attend seminars on STEM education and pedagogy. These sessions support educators in developing engaging, classroom-ready lesson plans that integrate CS3's engineering curriculum with the interests and lived experiences of their students.

The program requires a commitment of approximately 24 hours per week. Participants are **paid a stipend of \$5,000** for their participation.

Summer 2026 applications are now open! Click below to apply:

[Summer 2026 Application](#)

KEY DATES

Application Opens:

April 24, 2026

Application Closes:

May 31, 2026

Interview Begin:

May 18, 2026

Decisions Released:

June 12, 2026

Program Dates:

July 13 - August 7, 2026

Lesson Plans

- [2025](#)
- [2024](#)

RET Program Materials

- [2025](#)
- [2024](#)



Learn the fundamentals of streetscape technology: Teachers attend a presentation at Columbia University by Professor Roxana Geambasu, CS3 Lead of Research Thrust 3 on Security, Privacy, and Fairness.



Participate in multi-level mentorship: Teachers collaborate on research projects with engineers and sociologists from Columbia University and Lehman College, as well as other STEM educators.



Success: Teachers present their research findings and celebrate their four weeks of hard work!

Program Goals



Build foundational knowledge of smart streetscape technologies and their real-world applications.



Develop familiarity with computer vision, data collection methods, and statistical analysis techniques.



Gain hands-on experience in research design, methodologies, and data-driven inquiry within an engineering context.



Explore how generative AI tools can support research, analysis, and teaching.



Develop tools, experiences, and professional relationships with engineers, social scientists, and fellow STEM educators.



Create and implement engaging, standards-aligned lesson plans that bring cutting-edge STEM concepts into the classroom.

Program Details

- **Program Dates:** July 13 - August 7, 2026
- Mondays through Thursdays, 9am-4pm
- In-person sessions hosted at Columbia University
- **Teachers receive a \$5,000 stipend to support them over the summer.**
- Teacher Responsibilities:
 - Attend all summer program activities
 - Design and implement a lesson plan based on CS3 research within a classroom with grade 6-12 students

during the academic year following the summer program

- Complete final presentation
- Complete program assessment surveys

Eligibility

- Certified math or science teacher
- U.S. citizen or permanent resident
- Currently teaching at a public middle or high school in New York City (strong preference for educators in Harlem-based schools)
- Endorsement from school administration required

Preferred Qualifications

- Introductory knowledge of computer programming (any language)
- Strong general computer skills, including comfort working with spreadsheets and managing, collecting, and processing data

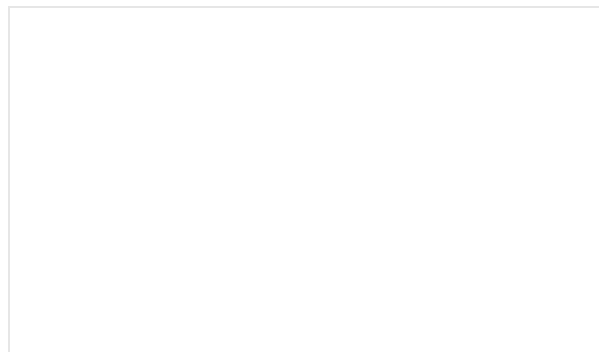
- Interest in applying computer vision and AI in real-world contexts
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Application Requirements

- Completed application form
- One reference letter from your school administration
(*submitted via application*)
- Current resume (*submitted via application*)
- Completed personal statement (*submitted via application*)
- **Summer 2026 applications are now open! Click below to apply:**

[Summer 2026 Application](#)

Teacher Stories





**Meet the Teachers:
Insights from our NSF
COSMOS-NewLAW-CS3
REM/RET Program**

August 3, 2023

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Program Leads



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