Anton Rozhkov

Ph.D.
Industry Assistant Professor

Brooklyn, NY, 11201
anton.r@nyu.edu
Web: antonrozhkov.com
LinkedIn: linkedin.com/in/anton-rozhkov

ACADEMIC EXPERIENCE

New York University (NYU), New York City, NY

- **Director of the M.S. in Applied Urban Science and Informatics Program** — **Sep 2024 – present**

- **Industry Assistant Professor** — **Sep 2023 – present**
  Tandon School of Engineering:
    - Center for Urban Science and Progress
    - Department of Civil and Urban Engineering (Urban Systems)

  Wagner Graduate School of Public Service — **Aug 2025 – present**
    - Urban Planning (affiliated faculty)

EDUCATION

University of Illinois Chicago (UIC), Chicago, IL — **Aug 2023**
Ph.D., Department of Urban Planning and Policy

- Dissertation: "Transition to Decentralized Energy in Cities through a Complex Systems Approach"
    - Publications: [J5] and [J7]; conference presentations: [P4], [P9], [P10], [P14], [P17] and [P19]

University of Illinois Chicago, Chicago, IL — **Dec 2018**
Certificate in Geospatial Analysis and Visualization

Military Technical University, Balashikha, Russia — **June 2015**
B.S./M.S., Jurisprudence

State University of Land Use Planning, Moscow, Russia — **June 2014**
B.S./M.S., Engineer in Land Cadaster, Summa Cum Laude

TEACHING EXPERIENCE

Tandon School of Engineering (NYU), New York City, NY — **Fall 2023 – present**
Industry Assistant Professor

- **Urban Decision Models** | CUSP-GX 8053 (1 semester, 31 students; Fall 2023)
- **Geographic Information Systems** | CUSP-GX 5053 (3 semesters, 5 sections with 22-24 students in each, projects showcase: Fall 2023; Fall 2024: sections A\B; Fall 2025: sections A\B)
- **Machine Learning for Cities** | CUSP-GX 7033 (1 semester, core course for master's students and elective for doctoral students, 82 students; Spring 2024)
- **Urban Spatial Analytics** | CUSP-GX 8033 (2 semesters, 19-24 students; Spring 2024; Spring 2025)
- **Capstone Urban Science Intensive II: Data Analysis and Communications** (1 semester, 74 students; Spring 2025)
- **Dissertation Level Research in Civil & Urban Engineering** | CE-GY 999X (3 semesters, 1 student)
- **Guided Studies** | CUSP-GX 900X (4 semesters, 5 students)
- **International Summer School: Urban Data Science** (3 weeks, 24 students; co-teaching with the University of Athens (Greece), Technological University of Uruguay (Uruguay), University of Lisbon (Portugal), and University of Tuscia (Italy))

Tandon School of Engineering (NYU), New York City, NY　　　　**Fall 2024 – Fall 2025**
Course Manager at Digital Learning Department

- Development of non-credit online *Geospatial Data Science* course

Department of Urban Planning and Policy (UIC), Chicago, IL　　　**Fall 2021 – Spring 2023**
1. Instructor of Record (IOR)

- **Intermediate GIS for Planning and Policy** (3 semesters, 10-25 students; Spring 2023, Fall 2021 & 2022)
- **Geographic Information Systems for Planning and Policy** (1 semester, 21 students; Spring 2022)

2. Teaching Assistant　　　　　　　　　　　　　　　　**Fall 2018 – Spring 2021**

- **Intermediate GIS for Planners** (1 semester, 30 students)
- **Introduction to Geographic Information Systems** (5 semesters, ~20-25 students in each section)

College of Urban Planning and Public Affairs (UIC), Chicago, IL　　　**Summer 2022**
Graduate Assistant

- Assistance with curriculum preparation for courses that are part of the Geospatial Analysis and Visualization (GSAV) campus certificate: undergraduate and graduate-level GIS courses with beginner, intermediate, and advanced topics

Institute for Environmental Science and Policy (UIC), Chicago, IL　　**Summers 2022 & 2023**
Graduate Assistant

- Assistance with a literature review of system methods and curriculum development for the classes that are part of the Environmental Planning concentration in a master's program. The central topics are environmental and social justice, climate change mitigation, hazard and resilience planning, life cycle assessment, system thinking, sustainable development, environmental policy, and urban metabolism
- Assistance with grant writing (EPA Pollution Prevention Grant: Promoting Environmental Health and Justice Through Sustainable Food Service Products – funded)

RESEARCH EXPERIENCE

New York University, New York City, NY　　　　　　　　　　**Sep 2023 – present**

Project: A Multi-Faceted Analysis of the Influence of State Energy Policies on Spatial Clustering of Wind and Solar Farms in the U.S. (Summer 2024 – present)

- o Analyze and interpret spatial distribution patterns of renewable energy infrastructure in the United States, incorporating environmental factors like solar radiation and wind speed along with state-level policy analysis to assess regional clustering and support for renewable energy deployment [ArcGIS Pro: Spatial Analysis, Large Language Models]
- o Conference presentations: [P23]

Project: An Empirical Investigation into Affordable Transit-Oriented Development (A-TOD) in California: Applying Classification and Scoring Systems (Summer 2024 – Summer 2025)

- o Evaluate the suitability of California High-Quality Transit Areas (HQTAs) for Affordable Transit-Oriented Development, incorporating transit infrastructure quality, housing affordability, and minority presence to inform policy and investment decisions [ArcGIS Pro, Python]
- o Funded by a California State University Transportation Consortium with the Mineta Transportation Institute (MTI); in collaboration with San José State University (SJSU)
- o Conference presentations: [P27]

Project: Fostering Inclusivity and Diversity in GIS Curriculum (Fall 2024 – present)

- o Increase inclusivity in GIS education by expanding the curriculum at the Tandon School of Engineering, emphasizing anti-colonial perspectives in geographic studies, integrating diverse global case studies, and fostering critical engagement with underrepresented areas to create a model for inclusive GIS and data science education [Pedagogy, Qualitative Methods].
- o Funded by New York University's Office of the Provost through the Teaching Advancement Grant
- o Conference presentations: [P29]

Project: City Pulse: Urban Stress Modeling Project (Fall 2025 – present)

- o Leveraging expertise from public health, urban science, computer science, and community engagement, the project aims to develop an Agent-Based Model [ABM] that predicts and mitigates health impacts caused by environmental stressors in NYC's low- and middle-income neighborhoods [ABM, Python, Machine Learning]
- o Funded by the New York University's Goddard Impact Group Award, NYU Office of the Provost

Project: Machine Learning and GIS Framework for Traffic Congestion Optimization with GeoAI (Fall 2024 – present)

- o Explore urban traffic congestion in New York City using Uber's H3 Hexagonal Hierarchical Spatial Indexing system, machine learning models, and geospatial artificial intelligence (GeoAI) for real-time traffic prediction and optimization, incorporating spatial data collection, visualization, and targeted intervention strategies [Machine Learning; Large Language Models]
- o Conference presentations: [P31]

Project: Are Planning Programs Ready to Address the Ongoing Climate Crisis with Their Curricula? (Fall 2023 – Fall 2024)

- o This study examines the limited presence of energy planning courses within climate-focused curricula in U.S. urban and regional planning programs, recommending curriculum enhancements and interdisciplinary collaboration to better prepare future planners for the sustainability agenda [Pedagogy, Qualitative Methods]

Project: Sustainable Cityscape: Mapping Tomorrow's Urban Microgrids (Fall 2024 – Summer 2025)

- o Identify optimal locations for renewable-powered microgrids by analyzing renewable energy potential, infrastructure, environmental justice perspective, and community needs in the state of California to inform sustainable energy policies and resilient city planning [ArcGIS Pro, Machine Learning]
- o Part of the NYU CUSP year-long capstone for master's students

Project: Assessing the Long-term Environmental Implications of Internal Migration by Analyzing the Pre- and Post-pandemic Environmental Sustainability (Fall 2023 – present)

- o Analyze internal migration trends and post-pandemic land-use changes to assess long-term environmental sustainability, focusing on factors like climate impacts and socioeconomic drivers of relocation [ArcGIS Pro]
- o Conference presentations: [P22]

Project: Mathematical and Algorithmic formulation of EV Charging Station Placement (Fall 2024 – present)

- o Identify optimal locations for deploying electric vehicle (EV) charging stations in New York City municipal fleets by clustering charging points to enhance utilization rates and reduce infrastructure costs through shared charging schemes [Optimization, Python]

Project: Urban Stress Monitoring: Assessing Environmental Exposures and Stress Responses in Low- and Middle-Income Neighborhoods of New York City (Fall 2024 – Spring 2025)

- o Develop a framework to assess health impacts of environmental stressors like heat, noise, and air pollution on marginalized communities using wearable sensors and machine learning, enabling targeted interventions for at-risk populations [ArcGIS Pro, Sensor Technology, Machine Learning]
- o Part of the NYU CUSP year-long capstone for master's students
- o Collaboration with Dr. Prince Amegbor (NYU) and Dr. Zhaoxi Zhang (NYU; University of Florida)
- o Conference presentations: [P25] and [26]

University of Illinois Chicago, Chicago, IL   May-Aug 2023

Project: The International Comparison Study of Hazard Resilient Cities: From Risk Evaluation to Developing Pathways (Spring – Summer 2023)
- o Research on approaches to planning for resilience to hazards and dealing with hazards in the U.S. urban context, and supplementary research on examples of household adaptation to hazards, behavior, and actions toward increasing resilience
- o Collaboration with Dr. Nedovic-Budic (University College Dublin, Ireland)

Institute for Environmental Science and Policy (UIC), Chicago, IL   **Jan-May 2021**
Research Assistant

Project: Sustainable Urban-Regional Modeling ([SURe Modeling](#)) Network Project for energy, food, and water systems (Spring 2021)

- o Conduct a series of collaborative workshops for city planners, regional partners, and other stakeholders to develop causal loop diagrams representing the integrated urban-rural social and ecological system in Northern Illinois [Miro, Gephi, Java]
- o Funded by a Sustaining Illinois grant from the Illinois Innovation Network (INN); collaboration with Northern Illinois University
- o Publications: [J2] and [J9]; conference presentations: [P12] and [P13]

Urban Data Visualization Lab (UIC), Chicago, IL   **Sep 2018 – Dec 2020**
Research Assistant

Project: Map-The-Count Census 2020 Data Research and GIS Visualization Pilot (Spring – Fall 2020)

- o Develop and maintain real-time web maps from the big data collected from the partners, manage a web platform, perform data analysis of outreach activities [ArcGIS, Machine Learning – Python]
- o Funded by the Illinois Department of Human Services
- o Publications: [J1] and [J3]; conference presentations: [P7] and [P18]

Project: Illinois COVID-19 Vulnerability Maps (Spring 2020)

- o Develop web maps that visualize and identify compounding vulnerabilities, both to the virus and to the socio-economic impact of the pandemic [ArcGIS Online]
- o Collaboration with Institute of Government and Public Affairs at the University of Illinois System

Project: Folded Map Project (Summer 2019)

- o Create web maps for a general audience using open-source software [QGIS and JavaScript]
- o Collaboration with the Department of Sociology (UIC), Institute for Policy and Civic Engagement (UIC), and social justice artist [Tonika Johnson](#)

Project: Oral Health in the City of Chicago (Summer 2019)

- o Identify spatial patterns of oral public health and risk for the upper airway and aerodigestive tract cancers in Chicago [ArcGIS Pro and QGIS]
- o Collaboration with the College of Medicine (UIC) and the College of Dentistry (UIC)

Urban Transportation Center (UIC), Chicago, IL   **Jan-May 2018**
Research Assistant

Project: Illinois Department of Transportation: Economic Development Project (Spring 2018)

- o Conduct surveys with past grantees, literature review, GIS analysis, and evaluation [ArcGIS]

RELATED PROFESSIONAL EXPERIENCE

Russian Grids – "Rosseti" Group of Companies, Moscow, Russia   **May 2014 – June 2017**
Senior Specialist

- ▪ Managed the project of creating a laboratory for electrical equipment testing, development of Smart Grid in Moscow and St. Petersburg, and programs of energy efficiency
- ▪ Established communication with shareholders, government, public, and international partners
- ▪ Committee on the Implementation of the Program of Charging Infrastructure for Electric Vehicles

EcoGeoTech, Ltd., Moscow, Russia   **Fall 2013**
Intern

- ▪ Intern in the GIS department, creating maps from the field gas-geochemical soil surveys [MapInfo and GoldenSoftware Surfer]

PEER-REVIEWED PUBLICATIONS

Published:

[J10] ***Rozhkov, A.***, Zandiatashbar, A., Seyrfar, A. (2025). Tackling Transportation Inequality through Unveiling Chicago's Transit Deserts and Vulnerable Communities. *Journal of Urban Planning and Development.* 151(3): 04025030. https://doi.org/10.1061/JUPDDM.UPENG-5499

[J9] Chauhan R. S., Sutradhar U., ***Rozhkov, A.***, & Derrible., S. (2025). Causation versus Prediction: Comparing Causal Discovery and Inference with Artificial Neural Networks in Travel Mode Choice Modeling. *npj Sustainable Mobility and Transport,* 2, 5. https://doi.org/10.1038/s44333-024-00022-4

[J8] ***Rozhkov, A.***, Zellner, M., Murphy, J. T., Massey, D. (2025). Identifying Leverage Points for Sustainable Transitions in Urban – Rural Systems: Application of Graph Theory to Participatory Causal Loop Diagramming. *Environmental Science & Policy*, 164, 103996. https://doi.org/10.1016/j.envsci.2025.103996

[J7] ***Rozhkov, A.*** (2024). Applying graph theory to find key leverage points in the transition toward urban renewable energy systems. *Applied Energy*, 361: 122854. https://doi.org/10.1016/j.apenergy.2024.122854

[J6] ***Rozhkov, A.***, Movahedi, A., & Derrible, S. (2023). A machine learning framework to assess the impact of the COVID-19 pandemic on electricity consumption patterns. *Cities*, 143, 104639. https://doi.org/10.1016/j.cities.2023.104639

[J5] ***Rozhkov, A.*** (2023). Harnessing European policies for energy planning in Illinois: Overcoming barriers and transitioning to a climate-neutral society. *Sustainable Cities and Society*, 98, 104803. https://doi.org/10.1016/j.scs.2023.104803

[J4] Movahedi, A., Parsa, A.B., ***Rozhkov, A.***, Lee, D., Mohammadian, A., Derrible, S. (2023). Interrelationships between urban travel demand and electricity consumption: a deep learning approach. *Scientific Reports*, 13, 6223. https://doi.org/10.1038/s41598-023-33133-y

[J3] ***Rozhkov, A.***, Zandiatashbar, A., Massey, D., Shin, J., Smith, J., & Zellner, M. (2023). Effectiveness variation of different census outreach activities: An empirical analysis from the state of Illinois using machine learning and user interface technologies for participatory data collection. *Applied Geography*, 154, 102928. https://doi.org/10.1016/j.apgeog.2023.102928

[J2] Zellner, M., D. Massey, ***A. Rozhkov***, & J. T. Murphy. (2023). Exploring the Barriers to and Potential for Sustainable Transitions in Urban–Rural Systems through Participatory Causal Loop Diagramming of the Food–Energy–Water Nexus. *Land*, 12, no. 3: 551. https://doi.org/10.3390/land12030551

[J1] Shin, J., Zandiatashbar, A., Massey, D., ***Rozhkov, A.***, Smith, J., & Zellner, M. (2022). Intrastate applicability of National Census Response Rate Models: The case of the 2020 Census in the state of Illinois, United States. *Population, Space and Place*, 28, e2608. https://doi.org/10.1002/psp.2608

Accepted/Submitted/Revise and Resubmit:

Rozhkov, A. Are Planning Programs Ready to Address the Ongoing Climate Crisis with Their Curricula? [Revise and resubmit]

Rozhkov, A. Decentralized Renewable Energy Integration in the Urban Energy Markets: A System Dynamics Approach, PREPRINT (Version 1) available at Research Square, https://doi.org/10.21203/rs.3.rs-3835543/v1 [Revise and resubmit at *PLOS Complex Systems*]

Lyu, S. & ***Rozhkov, A.*** Where Solar Pays: Policy Sensitivity Across Chicago's Austin and Oak Park [Under peer review]

Ramakrishnan, U. C. & ***Rozhkov, A.*** Intersecting Crises: A Systematic Review of Internal Migration, Climate Change, and Pandemic Impacts [Revise and resubmit]

Rozhkov, A., Fan, F., Jin, Y. Electricity Consumption through the Lens of Planning: Exploring the Role of Microgrids in a Multi-Factorial Context [Revise and resubmit]

Harris, Z. & ***Rozhkov, A.*** Exploring Economic Disparities in Banking Access using Geographic Information Systems and Hotspot Analysis. [Revise and resubmit]

Rozhkov, A. & Das, K. A Multi-Faceted Analysis of the Influence of State Energy Policies on Spatial Clustering of Wind and Solar Farms in the U.S. [Revise and resubmit]

Zandiatashbar, A., ***Rozhkov, A.***, Nemet, S., Washington, A. Transit Access, But at What Cost? Affordability Outcomes Across California's Transit-Oriented Development (TOD) Typologies. [Under peer review]

Rozhkov, A., Anantharaju, S., Ma, M. Car Oriented or Train Oriented? A Geospatial Analysis of U.S. Cities. [Under peer review]

Zhang, Z., Zhang, X., Xia, W., Yang, X., Quansah, R., ***Rozhkov, A.***, Amegbor, P. Africa Perspectives on the Psychosocial Impact of Favorite and Stressful - Insights from Public Participation Geographic Information Systems (PPGIS) in Accra, Ghana [Under peer review]

REFERRED CONFERENCE PRESENTATIONS

[P31] ***Rozhkov, A.*** (presenter), Motawar, P., Patil, R. "GeoAI-Powered Traffic Modeling: A Framework for Predictive Spatial Analytics," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Minneapolis, Minnesota, USA),* Oct 23-25, 2025.

[P30] ***Rozhkov, A.*** (presenter) Roundtable: "Preparing for the Academic Job Market," hosted by the ACSP Student Governing Board Representatives, *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Minneapolis, Minnesota, USA),* Oct 23-25, 2025.

[P29] ***Rozhkov, A.*** (presenter) "Building an Inclusive GIS Curriculum for the Next Generation of STEM," *Esri User Conference 2025: Education Summit (San Diego, California),* Jul. 12-18, 2025.

[P28] Mozaffarian, L. (presenter), ***Rozhkov, A.***, Islam, A. "AI-Powered Climate Resilience: Transforming Tribal Energy Policy with Smart Planning and Crowdsourced Innovation," *AI and Cities: An International Forum for Innovation and Collaboration (virtual),* May 9-10, 2025.

[P27] Nemet, S. (presenter), Zandiatashbar, A., ***Rozhkov, A.*** "Assessing Affordability and Equity in Northern California Transit-Oriented Development: A Typology-Based Spatial Analysis," *2025 Pacific Southwest Region (PSR) University Transportation Center (UTC) Annual Congress (Berkeley, California),* Mar. 24-25, 2025.

[P26] Zhang, X. (presenter), Yang X., ***Rozhkov, A.***, Amegbor, P., Zhang, Z. "Sensor-based Observation of Urban Stress in New York City," *American Association of Geographers (AAG) Annual Meeting (Detroit, Michigan),* Mar. 24-28, 2025.

[P25] Yang X. (presenter), Zhang, X., Anason, G., Reginald, Q., ***Rozhkov, A.***, Zhang, Z., Amegbor, P. "Sensor-Based Micro-Level Observations on Stress Spatial Distribution: A Case Study of Accra," *American Association of Geographers (AAG) Annual Meeting (Detroit, Michigan),* Mar. 24-28, 2025.

[P24] Chauhan R. S., Sutradhar U. (presenter), ***Rozhkov, A.*** (presenter), & Derrible, S. (presenter). Poster: "Causation versus Prediction in Travel Mode Choice Modeling," *Transportation Research Board (TRB) Annual Meeting (Washington, D.C., USA)*, Jan. 5-9, 2025.

[P23] ***Rozhkov, A.*** (presenter) "A Multi-faceted Analysis of Clustering Patterns of Renewable Energy Farms," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Seattle, Washington, USA)*, Nov. 7-9, 2024.

[P22] Ramakrishnan, U. C. (presenter) & ***Rozhkov, A***. "Analysis of Socio-economic and Environmental Factors for Internal Migration," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Seattle, Washington, USA)*, Nov. 7-9, 2024.

[P21] Sharma, S. (presenter), Rashad, I., Matahelemual, G. J., Patil, A., Das, K., Saxena, V., Chen., Z., ***Rozhkov, A.*** "Analyzing Modal Preferences, Land Use and Walkability for Improved AQI," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Seattle, Washington, USA)*, Nov. 7-9, 2024.

[P20] ***Rozhkov, A.*** (presenter). Roundtable: "Preparing a Planning Workforce for the Energy Transition," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Seattle, Washington, USA)*, Nov. 7-9, 2024.

[P19] ***Rozhkov, A.*** (presenter). Poster: "Powering Up Our Cities: Integrating Decentralized Energy Systems into the Market. A Complex System Perspective," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Chicago, Illinois, USA)*, Oct. 19-21, 2023.

[P18] ***Rozhkov, A.*** (presenter), Zandiatashbar, A., Massey, D., Shin, J., Smith, J., Zellner, M. "Effectiveness variation of different census outreach activities: An empirical analysis from the state of Illinois using machine learning and user interface technologies for participatory data collection," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Chicago, Illinois, USA)*, Oct. 19-21, 2023.

[P17] ***Rozhkov, A.*** (presenter). "Energy planning as a fundamental component of today's urban planning agenda. What lessons can the State of Illinois learn from European policies?", *Association of European Schools of Planning (AESOP) Annual Congress (Łódź, Poland / virtual)*, Jul. 11-15, 2023.

[P16] ***Rozhkov, A.*** (presenter). "Analyzing Transportation Equity in Chicago: Using GIS to Address Transit Deserts and Support Transit-dependent Communities," *Transport Chicago 2023 (Chicago, Illinois, USA)*, Jun. 16, 2023.

[P15] ***Rozhkov, A.*** (presenter). "Towards Creating a Hybrid Modality in Geographic Information Systems (GIS) Curriculum," *University of Illinois Urbana-Champaign's 14th Annual College of Education Graduate Student Conference (Urbana-Champaign, Illinois, USA / virtual)*, Mar. 3, 2023.

[P14] ***Rozhkov, A.*** (presenter). "A System Dynamics approach of urban decentralized energy systems integration into the current energy market," *Association of European Schools of Planning (AESOP) Annual Congress (Tartu, Estonia / virtual)*, Jul. 25-29, 2022.

[P13] ***Rozhkov, A.*** (presenter), Murphy, J., Massey, J., Zellner, M. "Analyzing Causal Loop Diagrams through the graph theory framework to identify key leverage points for sustainability in urban-rural systems in Northeastern Illinois (USA)," *Association of European Schools of Planning (AESOP) Annual Congress, Special Session: Joint AESOP-ACSP Session: Climate Justice in Practice - How Communities in Europe and America Plan to Address Climate Injustices (Tartu, Estonia / virtual)*, Jul. 25-29, 2022.

[P12] ***Rozhkov, A.*** (presenter), Murphy, J., Massey, J., Zellner, M. "Using participatory Causal Loop Diagraming and graph theory to identify key leverage points for sustainability in urban-rural

systems," *Academy of Architecture and Urban Studies Workshop: Sensing the City: tracing complex urban patterns and their implications for urban governance (Tallinn, Estonia / virtual)*, Jul. 21-22, 2022.

[P11] Movahedi, A. (presenter), Parsa. A.B., *Rozhkov, A.*, Derrible, S., Mohammadian, A. Poster: "Interrelations between Two Critical Infrastructure: Travel Demand and Electricity Consumption," *Transportation Research Board (TRB) Annual Meeting (Washington, D.C.)*, Jan. 9-13, 2022.

[P10] *Rozhkov, A.* (presenter). "Using System Dynamics approach to model urban decentralized energy systems," *IEEE Conference on Visualization and Visual Analytics (VIS) 2021 – Chicago Satellite Event (University of Illinois Chicago and Argonne National Laboratory, Chicago, Illinois, USA)*, Oct. 26, 2021.

[P9] *Rozhkov, A.* (presenter). "A System Dynamics approach of urban decentralized energy systems integration into the current energy market," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (virtual)*, Oct. 7-9 & 21-24, 2021.

[P8] *Rozhkov, A.* (presenter), Boria, E., Seyrfar, A. "Proposing an Energy Urban Planner role to integrate energy consumption decision-making," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (virtual),* Nov. 5-8, 2020.

[P7] Shin, J. (presenter), Zandiatashbar, A., Massey, D., *Rozhkov, A.*, Zellner, M. "Introducing the Illinois Census 2020 Map The Count (MTC): Using Geographically Adjusted Models to Project Census 2020 Mail Return Rate in Illinois," *Illinois GIS Association (virtual),* Oct. 5-6, 2020.

[P6] Boria, E. (presenter), *Rozhkov, A.*, Seyrfar, A. "Identifying the Need for an Energy Urban Planning Role," *Applied Energy Symposium: MIT A+B (virtual)*, Aug. 12-14, 2020. *Energy Proceedings*, ISSN 2004-2965, vol. 8, https://doi.org/10.46855/energy-proceedings-6879

[P5] Movahedi, A., *Rozhkov, A.*, Derrible, S. (presenter). "Identifying Spatial Patterns and Profiles of Electricity Consumption in Chicago to Develop Tailored and Actionable Energy Reduction Policies," *Actionable Science for Urban Sustainability (AScUS), (Segovia, Spain / virtual),* June 3-5, 2020.

[P4] *Rozhkov, A.* (presenter). "Understanding the Relationship between Urban Form and Energy Consumption Patterns," *Association of Collegiate Schools of Planning (ACSP) Annual Conference (Greenville, South Carolina, USA)*, Oct. 24-27, 2019.

[P3] *Rozhkov, A.* (presenter). "Application of Various Methods of Environmental Monitoring for Effective Land Use in Urban Areas," *Annual Conference of the Student Scientific Society of the State University of Land Use Planning (Moscow, Russia)*, Apr. 21, 2014.

[P2] *Rozhkov, A.* (presenter). "Importance of Gas-Geochemical Analysis as an Integral Part of Environmental Monitoring," *Annual Conference of the Student Scientific Society of the State University of Land Use Planning (Moscow, Russia),* Dec. 9, 2013.

[P1] *Rozhkov, A.* (presenter). "The Role of Land Lease in the Municipal Property Management," *VII International Scientific and Practical Conference of Young Scientists (Moscow, Russia)*, Nov. 22, 2012. Conference Proceedings: Vershinin V.V. and Svirezhev K.A. (Eds.) "Land Use Planning and Land Cadaster: The Importance of Innovation and Strategic Investments for The National Economy Development", 2012, (pp. 82-85), ISBN 978-5-9215-0237-6

OTHER

Doctoral dissertation: *Rozhkov, A.* (2023). Transition to Decentralized Energy in Cities through a Complex Systems Approach. *University of Illinois at Chicago. Thesis.*
https://doi.org/10.25417/uic.24242236.v1

Research report: Carlson, K., Creuzer, M., Leffert, W., Massey, D., Radloff, N., **Rozhkov, A.**, Shin, J., Zandiatashbar, A., & Zellner, M. (2021). "Census 2020 and UDVL: Illinois State Resources." *University of Illinois Chicago.* https://doi.org/10.25417/uic.13541990.v2

GRANTS

2024 – 2025   ***An empirical investigation into Affordable Transit-Oriented Development (A-TOD) in California: Applying classification and scoring systems, Co-PI***
Funding: California State University Transportation Consortium with the Mineta Transportation Institute (MTI) at San José State University (SJSU)
Award amount: $75,000 / $20,000[1]
Status: Completed
Project period: 6/2024 – 6/2025

2025   ***Mapping for Impact: Tools and Outcomes for Curriculum Alignment at CUSP, Co-PI***
Funding: Seed Grant, NYU's Office of Academic Program Review & Assessment
Award amount: $2,000
Status: Completed
Project period: 1/2025 – 5/2025

2025 – 2026   ***City Pulse: Urban Stress Modeling Project, PI***
Funding: Goddard Impact Group Award, NYU's Office of the Provost
Award amount: $19,500
Status: Active
Project period: 9/2025 – 5/2026

2024 – 2026   ***Fostering Inclusivity and Diversity in GIS Curriculum, PI***
Funding: Teaching Advancement Grant, NYU's Office of the Provost
Award amount: $7,400
Status: Active
Project period: 9/2024 – 3/2026

2026 – 2027   ***Mapping Urban Stress: Crowdsourcing Insights into Environmental and Psychosocial Factors, Co-PI***
Funding: National Science Foundation (NSF)
Award amount: $499,894
Status: Pending
Project period: 4/2026 – 7/2027

2025 – 2026   ***AI for Spatial Mapping and Analysis – Toolkit for Urban Planners, PI***
Funding: United Nations (UN) Human Settlements Programme
Award amount: $39,606
Status: Pending
Project period: 9/2025 – 2/2026

2025 – 2027   ***Closing the Access Gap with GIS-Driven Insights on Nevada BLM Lands, PI***
Funding: Bureau of Land Management (BLM)
Award amount: $69,103
Status: Pending
Project period: 9/2025 – 8/2027

---

[1] For joint grant funding: $XX,XXX – total project funding / $XX,XXX – Rozhkov's budget

EDITORIAL RESPONSIBILITIES

- Applied Spatial Analysis and Policy – Editorial Advisory Board
- PLOS One – Guest Editor
- Land (Special Issue: Land and Green Infrastructure Synergies: Advancing Ecological and Social Sustainability in Urban Environments) – Guest Editor

JOURNAL REVIEWER

- Nature Communications (1)
- Scientific Reports (Nature Portfolio) (2)
- ASCE Journal of Infrastructure Systems (4)
- Springer Nature (SN) Social Sciences (2)
- Environmental Engineering and Management (1)
- Sustainable and Clean Buildings (1)
- PLOS One (1)
- Cities (2)
- Discover Sustainability (1)
- Indonesian Journal of Electrical Engineering and Computer Science (1)
- Discover Cities (2)
- Systems (1)
- Journal of Environmental Management (1)
- Sustainability (1)
- Environmental Systems and Decisions (1)
- Land (1)
- ASCE Journal of Urban Planning and Development (1)
- City, Territory, and Architecture (1)
- Urban Science (1)
- PRX Energy (American Physical Society Journal) (1)
- Sustainable Futures (1)
- Energies (1)
- Transportation Research Board (3)
- Carbon Balance and Management (1)
- Cities and Health (1)

SKILLS

Technical skills:

- **Geographic Information Systems:** ESRI ArcGIS (ArcMap, ArcGIS Pro, ArcGIS Online Package), QGIS, Mapbox, MapInfo Professional, Golden Software Surfer, Leaflet.js

- **Modeling and Data Science:** Data Analysis and Machine Learning (Python [*scikit-learn, numpy, pandas, pgmpy, scipy, geopandas, pyqgis, arcpy, pytorch, matplotlib, seaborn, networkx*] and R), System Dynamics and Causal Loop Diagrams (Vensim, Insight Maker, Miro, Silico), Agent-Based Modeling (NetLogo, Mesa), Networks (Gephi, Python), Qualitative Data Analysis (ATLAS.ti), Excel (optimization, solver, and YASAI simulation)

- **Visualization:** Adobe Illustrator/ Photoshop/ InDesign/ Premiere, Tableau, Final Cut Pro, Corel Draw, MS Office

- **Design:** AutoCAD, SketchUp

Languages: English (fluent); Russian (fluent, native language); Spanish (basic); French (basic)

AWARDS

2024 Global Planning Educators Interest Group (GPEIG) Student Case Study Award
Case study: "International Case Study: Harnessing European Policies for Energy Planning in Illinois"

2023 Case Study Award, Lincoln Institute of Land Policy ($2,000)
Case study: "Powering Up: How the Bronzeville Community Microgrid Brought Clean Energy and Resilience to Chicago's South Side"

2023 JPER Writing Workshop for Junior Scholars, Travel Award, Texas A&M College of Architecture, Association of Collegiate Schools of Planning (ACSP), and Journal of Planning Education and Research (JPER)

2023 Three Minute Thesis Competition (3MT®), Finalist, Graduate College, University of Illinois Chicago

2023 Graduate Student Excellence in Teaching and Mentoring Award (GSETMA), Doctoral honorable mention, Graduate College, University of Illinois Chicago ($600)

2022 Student Presenter Award, Graduate College, University of Illinois Chicago

2021 Student Travel Award (Scholarship), Global Planning Educators Interest Group (GPEIG), for attending the ACSP annual conference

2020 Helen Goodrick Scholarship, University of Illinois Chicago

2020 Travel Award, Graduate Student Council, University of Illinois Chicago

2019 Student Presenter Award, Graduate College, University of Illinois Chicago

2019 Travel Award, Graduate Student Council, University of Illinois Chicago

2019 Student Travel Award, Department of Urban Planning and Policy, University of Illinois Chicago

2012-2014 Grant of the President of the Russian Federation for exceptional undergraduate students with a major related to the modernization and technological development of the Russian economy

2009-2014 University Fellowship, State University of Land Use Planning, Moscow, Russia

PROFESSIONAL AFFILIATIONS

- American Society for Photogrammetry and Remote Sensing (ASPRS), Individual Faculty Member and Student Chapter Faculty Advisor (2025 – present)
- Transportation Research Board, Friend of the Standing Committees:
  - Geospatial and Visual Analytics (AED14) (2025 – present)
  - Young Participants Council (2025 – present)
  - Geographic Information Science (AED40) (2025)
  - Critical Transportation Infrastructure Protection (AMR10) (2025)
  - Artificial Intelligence and Advanced Computing Applications (AED50) (2025)
- National Sustainability Society (NSS), Member (2024 – present)

- Association of Collegiate Schools of Planning (ACSP), Full Faculty Member (2024 – present); Student Member (2020 – 2023)
- ESRI's Young Professional Network, Member (2024 – present)
- Association of European Schools of Planning (AESOP) Young Academics (YA) Network, Member (2022 – present)
- American Planning Association (APA – Illinois Chapter), Student Member (2017 – 2023)
- Russian Geographical Society, Member (2016 – 2023)

COMMUNITY SERVICE

Professional organizations:
- APPAM (Association for Public Policy Analysis & Management), section chair (Regulating and Reframing AI Policy – Nov 2025)
- GPEIG (Global Planning Educators Interest Group) Committee for Best Student Case Study Award (member: 2025 – present)
- ACSP selection committee for the Ed McClure Award for the Best Master Student Paper (member: 2024; chair: 2025 – present)
- ACSP Annual Conference, section discussant (Environmental Planning track – Nov 2024; Technology, Society and Analytical Methods track – Oct 2025)
- Metropolitan Mayors Caucus (Chicago), Grant Proposals External Reviewer (2023 – present)

University level:
- Provostial Early Career Faculty Institute (ECFI) Ambassador (2025 – present)

School level:
- NYU Tandon Teaching Innovation for Student Success Committee (2025 – present)
- NYU Tandon Graduate Curriculum and Standards Committee (2024 – present)
- NYU Tandon Assessment Committee (2024 – present)
- NYU Tandon Classroom Technology Advisory Committee (2023 – present)

Department level:
- NYU CUSP Computing Committee (2025 – present)
- NYU CUSP M.S. Students Admission Committee (chair; 2024 – present)
  - Increased admission numbers in the 2025-26 academic cycle
  - Developed and reinforced a mechanism for international students with visa and funding delays to start the program without significant complications
- NYU CUSP Curriculum, Assessment, and Accreditation Committee (chair; 2024 – present)
  - Created 7 knowledge concentrations in the M.S. program
  - Rehabilitated the curriculum for the current job market and academic goals
  - Process a curriculum mapping with aligning program learning objectives (PLOs) with course learning objectives (CLOs), and student learning outcomes (SLOs)
  - Renaming the M.S. program to address current trends
- NYU CUSP Faculty Search Committee (chair; 2024 – 2025)
  - Hired two contract (non-tenure track) faculty
- Urban Data Visualization Lab (UDVL) at UIC, Website Administrator (2020 – 2023)

Other:
- UIC Undergraduate Research Forum 2023, Judge (April 18, 2023)
- Graduate Student Council at UIC, Departmental Representative (2019 – 2020)
- College of Urban Planning and Policy Student Organization, Treasurer (2017 – 2020)
  - Advocating for PhD students' needs within the department and university

- o Organization and obtaining funding for monthly "Friday Forums – expert talks"
  - Behavior Energy Economics Sustainability & Technology (BEEST) Student Group (UIC), Member (2017 – 2019)
  - Committee on the implementation of the Program of charging infrastructure implementation for electric vehicles in Russia, Secretary (2015 – 2017)
  - Student Scientific Society of the State University of Land Use Planning, Member (2012 – 2014)

ADVISING

Ph.D. students:

- Udyama Chirammal Ramakrishnan (2023 – present), NYU, Urban Systems; Ph.D. advisor
- Charan Kukunoor (2024 – present), NYU, Urban Systems; Ph.D. committee chair
- Zair Cheema (2024 – present), NYU, Urban Systems; Ph.D. committee member
- Samuel Botts White (2024 – present), NYU, Civil Engineering; Ph.D. committee member
- Zoë Harris (2025 – present), UIC, School of Public Health; Ph.D. committee member
- Kim Hertz (2023 – 2024), NYU, Urban Systems; Ph.D. committee member

Master's students:

- Shourya Dokania (2025 – present) NYU, Applied Urban Science and Informatics, research assistant
- Afra Izzati Kamili (2025 – present) NYU, Applied Urban Science and Informatics, research assistant
- Kelsey Knight (2025 – present), NYU, Applied Urban Science and Informatics, guided study
- Pranav Nitin Motarwar (2024 – present), NYU, Computer Science, research assistant
- Rudra Patil (2024 – present), NYU, Computer Science, research assistant
- Snigdha Anantharaju (2025), NYU, Applied Urban Science and Informatics, guided study
- Mingchuan Ma (2025), NYU, Applied Urban Science and Informatics, guided study
- Ruoyu Li (2025), NYU, Applied Urban Science and Informatics, summer guided study
- Ole Siever (2024 – 2025), NYU, Applied Urban Science and Informatics, guided study
- Fan Fan (2024 – 2025), NYU, Applied Urban Science and Informatics, Capstone student
- Yanchi Jin (2024 – 2025), NYU, Applied Urban Science and Informatics, Capstone student
- Shenghan Lyu (2024 – 2025), NYU, Applied Urban Science and Informatics, research assistant
- Koyel Das (2024), NYU, Applied Urban Science and Informatics, summer guided study
- Nooshin Javidi (2021 – 2024), UIC, Urban Planning and Policy, mentee

High school students:

- 11 high school students from the ARISE 10-week summer program at Tandon School of Engineering (2025)

INVITED TALKS

Rozhkov, A., participation in the roundtable at the Urban AI Symposium, co-hosted by NYU Tandon School of Engineering and the Center for Spatial Information Science at the University of Tokyo, Oct. 18, 2025.

Rozhkov, A., panelist at the event "2025 ACSP Pre-Doctoral workshop for underrepresented students of color and LGBTQIA+ students," *ACSP Committee on Diversity, virtual,* Oct. 9, 2025.

Rozhkov, A. & Tran, P. H. "Mapping for Impact: Tools and Outcomes for Curriculum Alignment at CUSP," *Assessment Dialogues Series at New York University's program of Assessment and Accreditation,* upcoming, Oct. 8, 2025.

Rozhkov, A., "Turning Participatory Models into Decisions: Clean Energy in Practice," *Urban Research Seminar as part of NYU Urban Initiative,* Sep. 23, 2025.

Rozhkov, A., as part of workshop *"Future of Cities: Envisioning Future HealthScapes," side event at the United Nations' 10th Multi-stakeholder Forum on Science, Technology and Innovation (STI) for the Sustainable Development Goals, joint event of the Consulate General of Denmark in New York and the New York Institute of Technology,* May 6, 2025.

Rozhkov, A. "Participatory modeling for identifying leverage points in sustainable Food – Energy – Water systems," *guest talk at the School of Architecture and Design at the New York Institute of Technology,* Mar. 31, 2025.

Rozhkov, A. "Urban Science and Spatial Modeling," *guest talk at the Environmental Engineering Colloquium Series at the University of Connecticut (Department of Civil and Environmental Engineering),* Mar. 14, 2025.

Rozhkov, A. "Alternative and 'clean' energy sources," *guest lecture at Eastern Washington University (PLAN430/570 – Environmental Planning),* Mar. 3, 2025.

Rozhkov, A. "Introduction to Machine Learning. Regression and classification. Decision Trees," *guest lectures at the New York University (CUSP-GX 7033 – Machine Learning for Cities),* Jan. 24 and Jan. 31, 2025.

Rozhkov, A. *"*Future of a GIS profession in industry and academia," *panel discussion at GIS Day at Montclair State University,* Nov. 21, 2024.

Rozhkov, A. "An Analysis of Clustering Patterns of Wind and Solar Farms in the US," *lightning talk at [GIS Day 2024](#) at New York University,* Nov. 20, 2024.

Rozhkov, A. "Introduction to ArcGIS Online and Storymaps," *guest lecture at the New York University (ENVST-UA 372 – Exploring Earth: Remote Sensing and Spatial Analysis),* Apr. 8, 2024.

Rozhkov, A. "Reshaping Traditional Energy Infrastructure through Transition to Decentralized Systems," [NYU *Faculty Urban Research Day*](#) *(New York University Urban Initiative),* Mar. 6, 2024.

Rozhkov, A. *NYU CUSP + Urban Future Labs Showcase, New York University,* Dec. 6, 2023.

Rozhkov, A. "Participatory Modeling as a Decision-Making Tool and its Application in Data Science," *guest lecture at the New York University (PhD Colloquium, Center for Urban Science and Progress),* Nov. 7, 2023.

Rozhkov, A. "Causal loop diagrams,*" guest lecture at the University of Illinois Chicago (UPP 572 – System Methods for Environmental Planning and Policy),* Sep. 18, 2023.

Nedovic-Budic, Z. (presenter) and **Rozhkov, A**. "Dealing with Hazards in Urban Context and Resilient Cities in the USA – The International Comparison Study of Hazard Resilient Cities: From Risk Evaluation to Developing Pathways," *Hunan University, School of Architecture and Planning and School of Public Administration (Changsha, China),* May 25, 2023 and May 9, 2024.

Rozhkov, A. "How Microgrids and Decentralized Energy Could Help Us in Urban Sustainable Development?" *International Sakharov Environmental Institute of Belarusian State University (Minsk, Belarus / virtual),* Oct. 20, 2021.

Rozhkov, A. "Analysis of the Effectiveness of Census 2020 Outreach Activities: The Case of the State of Illinois," *guest talk at the Boston Area Research Initiative (BARI) meeting, Northeastern University,* Sep. 27, 2021.

Rozhkov, A. "Decentralized Energy Systems as an Alternative for the Traditional Power Grid," *guest lecture and term project review at the University of Illinois Chicago (UPP 505 – Plan Making)*, Feb. 16 and May 4, 2021.

Rozhkov, A. "Energy Urban Planning: Transition to Decentralized Energy in Cities through a Complex Systems Approach", *Planning Beyond Curriculum Lecture Series at the University of Banja Luka, Department of Spatial Planning (Banja Luka, Bosnia and Herzegovina / virtual)*, Dec. 8, 2020.

Rozhkov, A., Massey, D., Shin, J. "2020 Census in the State of Illinois," *guest lecture at the San Jose State University (GEOG 170 – Introduction to Mapping and Geographic Information Systems, virtual)*, Oct. 14, 2020.

Rozhkov, A. "Decentralized Energy as an Important Factor of Sustainability in Urban Areas", W*ebinar Series at the Vernadsky Nongovernmental Ecological Foundation – UNESCO Partner (Moscow, Russia / virtual)*, May 25, 2020 and May 31, 2021 (keynote).

Rozhkov, A. "Theory of Complexity and Complex Systems," *guest lecture at the University of Illinois Chicago (UPP 594 – PhD Seminar: Introduction to Scientific Inquiry)*, Oct. 17, 2018 and Nov. 18, 2019.

Rozhkov, A. "Energy in Cities,*" guest lecture at the University of Illinois Chicago (US 230 – Practices for Sustainable Cities)*, Jan. 23, 2018.

ONLINE JOURNALS, BLOGS, AND MENTIONS IN MEDIA

[When technology meets the town square: A journey to the heart of public interest technology](#), *NYU Tandon School of Engineering News*, Oct 20, 2025.

Anton Rozhkov discusses research on affordable housing and public transit, and CUSP's geospatial curriculum, *Fall 2024 Semester Highlights, NYU Center for Urban Science and Progress*, Dec. 10, 2024.

[Anton Rozhkov named as the new director of the M.S. in Applied Urban Science and Informatics at CUSP,](#) *NYU Tandon School of Engineering Newsletter*, Dec 4, 2024.

Book Chapters and Journal Articles, *GPEIG VOICE, Annual Newsletter of the Global Planning Educators Interest Group, 2024.*

[Alumni Profiles in Connector](#), Issue 2, Volume 26, *Urban Transportation Center at the University of Illinois Chicago*, Summer 2024.

[The Unconventional Engineer](#), Volume 4: Next 2022-2023, *NYU Tandon School of Engineering*, Oct 5, 2023.

JPER Writing Workshop for New Scholars Wrap Up, *Association of Collegiate Schools of Planning (ACSP), Texas A&M University, and Journal of Planning Education and Research (JPER)*, Jun 19, 2023.

Lincoln Institute Announces 2023 Case Study Award Winners, *Association of Collegiate Schools of Planning (ACSP) and Lincoln Institute of Land Policy,* May 30, 2023.

[CUPPA Ph.D. Candidate Anton Rozhkov Receives an Honorable Mention for the GSETMA Award](#), *College of Urban Planning and Public Affairs, University of Illinois Chicago*, Mar 17, 2023.

[Graduate Student Teaching Award Recipients,](#) *Center for the Advancement of Teaching Excellence (CATE) Newsletter, University of Illinois Chicago*, Mar 1, 2023.

PhD Candidate from the University of Illinois Chicago gave an online lecture, *International Sakharov Environmental Institute of Belarusian State University Newsletter (in Russian)*, Oct 22, 2021.

[***NIU's urban-regional modeling helps to advance environmental research and policy***](#), *NIU Today* (*Northern Illinois University)*, Sep 6, 2021.

COVID-19 Vulnerability Map, *University of Illinois Chicago Postdoctoral Association (PDA) Newsletter*, Jan 2021.

[***In the final days of the census, outreach workers struggle against apathy and distrust***](#), *Chicago Tribune*, Oct 5, 2020.

[***Policy Spotlight: Visualizing Vulnerability and Capturing the Pandemic's Human Toll***](#), IGPA Task Force on the Impact of the COVID-19 Pandemic, *Institute of Government & Public Affairs, University of Illinois System*, Apr 28, 2020.

[***UIC partners with IDHS through $20M census initiative in Illinois***](#), *UIC Today*, Feb 7, 2020

[***UDVL Assistant Participated in a Visualization Hackathon at University of Chicago***](#), *Urban Data Visualization Lab, University of Illinois Chicago*, Apr. 1, 2019.
  - The final interactive map of the [1919 Chicago Riot](#) - geocoding of incident locations and georeferencing of the old map led by Prof. John Clegg from the Department of History, University of Chicago.

SuccSEESful Fall 2018 Symposium at UIC, Anton Rozhkov & Elizabeth Kocs, *UIC Energy Initiative Newsletter*, November 18, 2018.