Matthew Bilik

Interested in the way that science, technology, and society interact in theory and in practice. Building ethical tools and studying prescriptions that constitute those outcomes. Studying digital ecosystems to identify, gauge, and reconcile epistemic inequality. My work is interdisciplinary and visits a variety of topics from urban planning and heat resiliency to social networks and their political economies.

Education

University of Michigan - Ann Arbor
Planned BSc., Computer Science, 2025.
Minor in Science, Technology and Society.

Brooklyn Technical High School
Regents Diploma with Advanced Designation with Honors, 2021.
Cumulative GPA: 100.56.

Research

NASA Goddard Institute for Space Studies, Earth Sciences
Research Intern, 2019 - 2021.
Urban Heat Islands and Remote Sensing: Characterizing Land Surface Temperature on the Neighborhood Scale.

COVID-19 and Climate Stresses Research Consortium
Research Intern, 2020 - 2021.
Implementing Q Learning and Multimethod Data Analysis to Determine Land Surface Temperature and Heat Indexed Routes at the Neighborhood-Scale.

Cornell Tech, Future of Automation Research Laboratory
Research Intern, 2020.
Quantifying Digital Interactions for Datasets: Applications and Feasibility.

New York City Mayor's Office of Data Analytics
Research Intern, 2019.
Civic Engagement & Data Literacy: A Novel Machine Learning Solution.

Publications

1. **Bilik, M.**, A. Teyton, M. Woody, L. Piacentini, H. Norouzi, and R. Blake. Implementing Q Learning and Multimethod Data Analysis to Determine Land Surface Temperature and Heat Indexed Routes at the Neighborhood-Scale. In *American Geophysical Union Fall 2020 Conference*, San Francisco, CA

2. A. Liebowitz, E. Sebastian, C. Yanos, **Bilik, M.**, R. Blake, and H. Norouzi. Urban Heat Islands and Remote Sensing: Characterizing Land Surface Temperature at the Neighborhood

Scale. In *IGARSS 2020 - 2020 IEEE International Geoscience and Remote Sensing Symposium*, page 4407–4409. Peer-reviewed

3. A. Teyton, M. Woody, L. Piacentini, **Bilik, M.**, H. Norouzi, and R. Blake. The Interconnection between the Urban Heat Island and Social Factors on Health Outcomes: Transforming Heat Wave Experiences into Meaningful Community Improvement. In *American Geophysical Union Fall 2020 Conference*, San Francisco, CA

4. L. Piacentini, M. Woody, A. Teyton, **Bilik, M.**, H. Norouzi, and R. Blake. The Urban Heat Island Effect: Capturing Community Engagement in Bedford-Stuyvesant, Brooklyn, NY. In *American Geophysical Union Fall 2020 Conference*, San Francisco, CA

5. M. Woody, A. Teyton, L. Piacentini, **Bilik, M.**, H. Norouzi, and R. Blake. Transforming Students into Climate Scientists through Urban Heat Island Investigations. In *American Geophysical Union Fall 2020 Conference*, San Francisco, CA

6. A. Liebowitz, E. Sebastian, C. Yanos, **Bilik, M.**, J. Ginchereau, M. Valentine, K. Barclay, S. Montoya, M. Rice, H. Norouzi, and R. Blake. Engaging Citizen Scientists in Characterizing Urban Heat Island at the Neighborhood Scale Using Satellite and Ground Observations. In *American Geophysical Union Centennial Conference*, San Francisco, CA

Awards and Fellowships

University Space Research Association Stipend Recipient
2019-2020. $4800.

New York City College of Technology Research Award
2021. $3000.

Extracurriculars

Executive Director, TechHacks
Started TechHacks, Brooklyn's first high school hackathon nonprofit. Organize hackathons biannually and workshops monthly. Raised $11,000+ dollars from sponsors such as Microsoft, VICE Media, BNY Mellon, and Bloomberg.

Director of Sponsorships, BlockchainsForSchools
Advise hackathon strategy and direct planning as a member of the executive board. Recipient of an MIT Sandbox Innovation Fund grant and Consensys grant winner. Raised $30,000+

Languages and Skills

English (native), Russian (heritage), Spanish (proficient)
Python, LaTeX, GIS, SciPy