Max Bahar (he/him)

Boston, MA | maxbahar.github.io | linkedin.com/in/max-bahar

SUMMARY

- Data scientist with 3 years of professional geospatial analysis experience, dedicated to leveraging data science to create impactful and innovative solutions for global climate challenges.
- Proficient in Python and data visualization, with expertise in energy system decarbonization and climate adaptation gained through graduate-level coursework and projects.

EDUCATION

Harvard University Expected: May 2026
M.S. Data Science
Relevant Coursework: The Climate Energy Challenge, Mathematical Modeling, Visualization

Boston College May 2021
B.A. Economics and Computer Science
Relevant Coursework: Climate Change and Society, Sustainable Energy, Algorithms, Econometric Methods

TECHNICAL SKILLS

Programming and Tools: Python (Pandas, NumPy, SciPy, scikit-learn, Matplotlib), Maptitude, Tableau
Specialized Skills: Energy systems analysis, geospatial analysis, machine learning, mathematical modeling

PROFESSIONAL EXPERIENCE

Caliper Corporation July 2021 - June 2024
Analyst, Maptitude Mapping Software
- Managed projects involving consulting, data processing, client training, and user experience design, overseeing end-to-end workflows to deliver high-quality geospatial solutions for Fortune 500 clients and government organizations.
- Analyzed nationwide Albertsons and Kroger store location data using Maptitude to assess the economic impact of their merger, identifying geographic overlaps and demographic variations across locations; presented findings in a blog post that garnered attention from the Financial Times.
- Developed Python scripts to process and clean banking compliance datasets with up to 3 million records from FFIEC's CRA and HMDA, enabling seamless integration with Maptitude for enhanced geospatial analysis.
- Led consulting projects for diverse stakeholders, including voter data integration, sales territory optimization, and streamlining geospatial workflows, incorporating custom metrics to improve client efficiency and decision-making.
- Trained and supported over 100 corporate and government clients, earning consistent positive feedback for clear communication and empowering users to effectively apply geospatial tools for strategic insights.

Boston College Economics Department June 2020 - May 2021
Research Assistant to Professor Paul Cichello
- Performed statistical analysis of time series COVID-19 data using Stata, highlighting how small growth rate variations impact long-term pandemic outcomes and enhancing public understanding of exponential growth dynamics.
- Designed data visualizations and authored five blog posts, effectively translating complex statistical concepts into accessible insights that informed policymakers and public health decisions during the COVID-19 pandemic.

RELEVANT PROJECTS

Harvard University Mathematical Modeling Project September 2024 - December 2024
Simulating Maximum Potential Intensity of Tropical Cyclones
- Modeled tropical cyclone intensity across different carbon emissions scenarios using CMIP6 climate model data, developing a Python library to ensure reproducibility and simplify data retrieval, analysis, and visualization.
- Spearheaded a collaborative project with strict deadlines, managing shifting scopes and refining methodologies to address emerging challenges, ensuring the successful delivery of actionable insights for climate policy and planning.

Boston College Economics Senior Thesis August 2020 - May 2021
Long Term Effects of Parental Migration on Indonesian Income
- Manipulated five waves of a longitudinal dataset in Stata to link variables across datasets, construct parental migration histories, and perform an instrumental variable regression to find the causal effects of parental migration on income.
- Managed a year-long research project analyzing parental migration in Indonesia, leveraging statistical techniques to uncover an upward trend in non-labor migration and provide insights for socioeconomic policy.

COMMUNITY INVOLVEMENT

Harvard Graduate Advisory Committee September 2024 - Present
Committee Member
- Organized monthly group dinners to foster community among students in Harvard's Data Science and Computational Science and Engineering programs, strengthening peer support networks and promoting interdisciplinary learning.