Kinga Bihari

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EDUCATION

University of California, Santa Barbara

Environmental Studies, B.A. – Summa Cum Laude

College of Letters & Sciences Honors Program

Selected coursework:

June 2024 GPA **3.94**

| Environmental GIS | Statistics & Data Science (R) | Data Wrangling & Visualization (R) | |
|---------------------------|-------------------------------|------------------------------------|--|
| Chemistry | Calculus, Linear Algebra | Soil Science | |
| Climate Change Mitigation | Restoration & Conservation | Ecology & Ecosystem Biodiversity | |

Balassi Institute Study Abroad Program (*Budapest, Hungary*)

Sept 2020 - June 2021

- Developed and analyzed sociological surveys to assess environmental attitudes based on cultural backgrounds
- Interpreted results with detailed visualizations and defended them to panel of professors

PROFESSIONAL EXPERIENCE

U.S. Environmental Protection Agency – Data Scientist

Aug 2024 - Present

Climate Change Division, Office of Atmospheric Protection

- Synthesize information on observed and projected impacts of climate change into accessible and trusted reports/web resources for the public and policymakers
- Conduct literature reviews to expand EPA's <u>reduced form model</u>, <u>FrEDI</u>, which projects future impacts of climate change in the U.S.
 - Run reduced-complexity climate model <u>FaIR</u> and FrEDI model, used to calculate EPA's Social Cost of Greenhouse Gases estimates for Regulatory Impact Analysis sections of environmental regulations
 - Develop complex data visualizations to communicate FrEDI model's capabilities to both scientific and policymaking audiences
- Research and synthesize national-scale datasets for multi-decadal trends in climate change indicator metrics for EPA's <u>Climate Change Indicators</u> suite
 - Organize and manage Climate Change Indicators geospatial resources, including quality analysis and development of new geospatial datasets

The Nature Conservancy – Research Fellow

June - Sept 2023

- Completed a comprehensive study including fieldwork, report writing and statistical analysis to identify
 potential biosecurity threats and evaluate detection strategies for the California Channel Islands
 - Systemized 70,000+ collected images and metadata in Timelapse and R
 - Collaborated on 50+ source literature review and development of internal summary report

Channel Islands Restoration – Restoration Intern

Mar - June 2023

• Improved ratio of native to non-native plant cover in San Marcos Foothills through restoration

RESEARCH EXPERIENCE

UC Santa Barbara:

King Laboratory for Biogeochemical Research – Research Assistant

April 2022 - June 2024

- Organized, formatted, and prepared thousands of soil samples for carbonate analysis
- Conducted soil carbonate analysis using DIC Analyzer to support carbon capture opportunities in restored wetlands
- Collaborated with peers on data analysis to identify and document pH and EC trends in soil samples
- Independently designed and executed study on how carbon:nitrogen ratios in *Salicornia pacifica* affect decomposition rates
 - Processed biomass samples & examined carbon and nitrogen content using Elemental Analyzer;

- analyzed and interpreted data in R
- Synthesized results into research paper published in an undergraduate journal

California Agrivoltaics Suitability Project - Student Researcher

Sept 2023 - June 2024

- Designed and researched a suitability analysis of collocating solar photovoltaics onto existing agricultural land in California to identify high potential areas for agrivoltaic installation
 - Analyzed dozens of state-scale geospatial datasets in ArcGIS Pro to calculate land suitability scores for agrivoltaics
 - Synthesized results into research paper published in an undergraduate journal

Landscape Ecophysiology & Function Lab - Research Assistant

Mar - June 2023

Created and edited raster and vector layers in QGIS

Egregious Polluters Project - Research Assistant

June - Sept 2022

- Contributed to a socially structured explanation of disproportionality in the production of pollution
 - Analyzed EPA's Toxic Release Data & quantitative data in Excel to create profiles on polluting facilities
 - Utilized ArcGIS Pro & other ESRI spatial planning software to create and interpret demographic maps

TEACHING EXPERIENCE

UC Santa Barbara – Learning Assistant, GIS for Environmental Studies

Dec 2023 - Mar 2024

- Facilitated instruction of 52 students in introductory ArcGIS Pro skills
- Mentored group projects in data acquisition/management and geospatial analysis

Hungarian Scouts in Exteris – *Junior Leader*

Aug 2014 - Sept 2020

Dec 2024

- Designed and executed annual curriculums for children focused on Hungarian language/culture and outdoor skills
- Organized overnight camping trips for groups of 20-30 children in remote locations

PUBLICATIONS

Peer-reviewed journals:

 Hunter, R., Bihari, K., Matos, J., Holmes, N., Wegmann, A., Brenner, L. Evaluating the effect of food-based lure and predator scent on detectability of mainland rodents with implications for biosecurity on the California Channel Islands. Western North American Naturalist. (Under review).

Undergraduate research journals:

- Bihari, K. & Wu, G. (2024). Analyzing plant tissue chemistry of Salicornia pacifica in restored and established wetlands. UCSB Undergraduate Research and Creative Activities Journal, 5. ISSN 2834-3352.
- Bihari, K. & King, J. (2024). Assessing agrivoltaic suitability across agricultural land in California through geospatial analysis. <u>UCSB Undergraduate Research and Creative Activities Journal</u>, 5. ISSN 2834-3352.

PRESENTATIONS

The Framework for Evaluating Damages and Impacts (FrEDI): A Reduced Form Approach for Quantifying Climate-Driven Damages to the U.S. and the Benefits of Greenhouse Gas Mitigation

American Geophysical Union Annual Meeting

Analyzing Plant Tissue Chemistry of Salicornia pacifica in Restored and Established Wetlands

Undergraduate Research & Creative Activities Conference
 Dept. of Geography Undergraduate Research Symposium
 Dept. of Ecology, Evolution & Marine Biology Undergraduate Research Symposium

Apr 2024

Evaluating the Effect of Food-based Lure and Predator Scent on Detectability of Mainland Rodents with Implications for Biosecurity on the California Channel Islands

| • | Point Conception Institute Science Symposium | Mar 2024 |
|---|--|-----------|
| • | California Islands Symposium | Oct 2023 |
| | Mantell Symposium in Environmental Justice and Conservation Innovation | Sept 2023 |

AWARDS

- U.S. EPA Superior Accomplishment Recognition Award, for high quality performance and achievement in multiple project areas
- UCSB Environmental Studies Outstanding Academic Achievement Award, for top 2.5% GPA
- Granada High School Valedictorian, class of 2019

SCHOLARSHIPS

- Pedrozzi Foundation Undergraduate Scholarship \$6,000
- Manalis Scholarship for Undergraduate Research \$2,000
- John and Ida Campbell Scholarship \$3,000
- TNC-UCSB Conservation Bren Environmental Leaders Fellowship \$6,500
- Balassi Institute Scholarship

SKILLS

| Programming Languages | R | Python (basic) | Julia (basic) |
|-----------------------|------------------|---------------------|-----------------------------------|
| Tools | ArcGIS Pro | QGIS | Reduced complexity climate models |
| Languages | English (native) | Hungarian (native) | Spanish (basic) |
| Laboratory Analyses | Elemental | Dissolved Inorganic | Camera trap data collection & |
| | Analyzer | Carbon Analyzer | analysis (Timelapse software) |