Tamara Rudic

Education

Brown University, Providence RI

- Bachelor of Science in Geology-Biology, GPA: 3.97
- Courses: Geochemistry; Conservation Biology; Advanced Remote Sensing; Humans, Nature, and the Environment; Biological Statistics; Ecology; Machine Learning for Earth Sciences

Work Experience

Yale University Center for Biodiversity and Global Change, New Haven CT	
Postgraduate Research Associate for Map of Life	

Coded a tool for automated large scale environmental sampling of biodiversity data using Python and ArcGIS; Developing digital interfaces for biodiversity conservation analysis tools; Performing geospatial analyses in ArcGIS; Developing communication strategy and managing social media platforms

NASA DEVELOP National Program – Jet Propulsion Lab, Pasadena CA

- Maya Forest Water Resources: used synthetic aperture radar, optical imagery, and machine learning in Google Earth Engine to map below-canopy inundation in the Maya Forest in collaboration with local government and environmental organization leaders in Belize, Guatemala, and Mexico
- Developed project proposal, technical reports, and StoryMaps to communicate our findings

Brown University Undergraduate Teaching Assistant, Providence RI Brown University Writing Fellow, Providence RI

Edited academic writing; guided students through the academic writing process in one-on-one settings

Other Research Experience

Senior Thesis: Mapping Agricultural Land Abandonment in Bosnia	Jan 2021 – May 2021	
- Used a Landsat time series and machine learning in Google Earth Engine to detect land abandonment		
Undergraduate Researcher in IBES, Brown University, Providence RI	Jun 2019 – Jun 2020	
- Microscopically analyzed leguminous root samples for mycorrhizal investments		
- Evaluated methods of leaf area index estimation in a tropical forest study area using R		
Leadership Alliance Research participant, University of Chicago, Chicago IL	Jun 2018 – Aug 2018	

Volunteer Experience

New Haven Reads literacy tutoring program, New Haven CT Nov 2021 – present Environmental Justice at Brown, Brown University, Providence RI *Sep 2018 – May 2021* Outdoor Leadership Environmental Education Program Leader, Providence RI Feb 2018 – May 2021 Facilitated creative workshops and field trips to teach environmental science and justice to high school students

Site Leader: designed curriculum, planned field trips, handled finances and logistical needs, organized trainings

Publications

Rudic, T.E.; McCulloch L.A.; Cushman K.C. 2020. Comparison of smartphone and drone lidar methods for characterizing spatial variation in PAI in a tropical forest. Remote Sens. 12, 1765. https://doi.org/10.3390/rs12111765

Honors and Awards	
Brown University Bonner Community Fellow	Aug 2019 – May 2021
Brown University Presidential Scholar	Aug 2017 – May 2021

Research Skills

Proficient in science communication, StoryMaps, ArcGIS Pro, Python, Google Earth Engine, geospatial and remote sensing analysis, JavaScript, and literature review; Intermediate in ArcGIS Online, QGIS, GitHub, R, conservation planning tools and decision making strategies, and statistical analysis

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Sep 2017 – May 2021

Sep 2021 – present

Jun – Aug 2021

Sep 2020 – Dec 2020

Sep 2019 – May 2021