Riasad Bin Mahbub

Senior Graduate Research Assistant, University of Arkansas

ENGR 112, University of Arkansas, Fayetteville, AR 72701

United States of America

Professional Summary

Environmental scientist and research professional with over 5 years of experience in biogeochemical flux analysis, carbon and methane cycling, and precision agriculture. Expertise in remote sensing, data science, and environmental modeling. Proven track record of publishing in peer-reviewed journals and presenting at international conferences. Seeking a data-driven role in the environmental or agricultural development industry.

Education

- Ph.D. Candidate, Environmental Dynamics

  University of Arkansas, 2021 – Present (Expected: 2025)

- M.S., Environmental Dynamics

  University of Arkansas, 2021 – 2023

- B.S., Environmental Science

  North South University, Dhaka, Bangladesh, 2015 – 2018

Professional Experience

- Graduate Research Assistant

  University of Arkansas | 2021 – Present

- Conducted remote sensing-based research to model gross primary productivity of rice.
- Compiled 14 site-years of Ameriflux data and calibrated eddy covariance sensors.
- Collaborated with interdisciplinary teams on field instrumentation and data modeling.
- Presented research findings at AGU, ASABE, and Ameriflux conferences.

- Research Assistant

  Decoupling Lab, North South University | 2018 – 2020

- Analyzed remote sensing data to extract features from drone imagery.
- Co-authored peer-reviewed papers on sea turtle conservation and land use policy.
- Modeled land cover change using GIS and spatial statistics.

Selected Publications

Mahbub, R. B. et al. (2025). Magnitude, drivers, and patterns of gross primary productivity of rice in Arkansas using a calibrated vegetation photosynthesis model. Agricultural and Forest Meteorology, https://doi.org/10.1016/j.agrformet.2025.110583

Mahbub, R. B. et al. (2019). Human appropriation of net primary production in Bangladesh, 1700–2100. Land Use Policy, https://doi.org/10.1016/j.landusepol.2019.104067

Technical Skills

Python, R, ArcGIS, SPSS, Microsoft Office, Google Earth Engine, QGIS, Eddy Covariance Sensor Calibration, Ameriflux Data Protocols

Awards and Grants

- Doctoral Academic Fellow, $48,000 | University of Arkansas
- Multiple Travel Grants for AGU, ASABE, and Workshops | $1100 each
- Graduate Student Award, Arkansas Soil and Water Education Conference | $200

Professional Affiliations

- Member, FLUXNET-Early Career Scientist Network
- Member, American Geophysical Union (2022–2023)