

**PhD Position: Machine Learning and Remote Sensing for Biogeochemical Cycle Studies in the Land-Ocean Continuum**

Dr. Bingqing Liu, Assistant Professor at the School of Geosciences, University of Louisiana at Lafayette, is seeking a highly motivated student interested in conducting research in the fields of machine learning, multispectral hyperspectral image analysis, aquatic remote sensing, and bio-optics of estuarine/coastal waters in the dynamic land-ocean continuum of the northern Gulf of Mexico coast. This PhD position is funded by NOAA and will start in spring 2024.

To apply for this position, please send an email to Dr. Bingqing Liu ([bingqing.optics.liu@gmail.com](mailto:bingqing.optics.liu@gmail.com)). Early submissions are encouraged as applications will be reviewed on a rolling basis. The selected candidate will receive a competitive stipend and have the opportunity for professional growth within a dynamic research environment.

Responsibilities:

- Collaborate with the research team to design and implement machine learning algorithms for multispectral hyperspectral image analysis.
- Conduct remote sensing data analysis, including aquatic remote sensing and radiometric characterization.
- Assist in field data collection, processing, and interpretation.
- Collaborate on research publications and presentations.

Requirements:

- Proficiency in programming languages such as Python or MATLAB.
- Knowledge of GIS software and spatial analysis.
- Experience and expertise in machine learning techniques and algorithms.
- Ability to work independently and collaborate effectively with the research team.

Preferred Qualifications:

- Completed master's degree in a relevant field (e.g., computer science, remote sensing, geospatial sciences, environmental sciences).
- Familiarity with multispectral hyperspectral image analysis tools and software.
- Previous research experience in remote sensing or related fields.

To apply, please submit the following documents:

- Resume/CV highlighting relevant coursework, skills, and experiences.
- Brief cover letter describing your interest in this position and relevant background.
- Any relevant academic transcripts or portfolio of past projects (if available).
- Contact information for at least two references who can speak to your skills and qualifications (if available).

I look forward to receiving your application and potentially welcoming you to our research team!