



## Ph.D. Opportunities in Remote Sensing at Arizona State University

Dr. Jiwei Li's lab (<https://jiweili.weebly.com/>) in Center for Global Discovery and Conservation Science (<https://gdcs.asu.edu/>), School of Earth and Space Exploration (<https://sese.asu.edu/>) at Arizona State University, Tempe is seeking 1-2 highly motivated Ph.D. students starting in Spring 2022 and/or Fall 2022. Ph.D. Students are guaranteed funding for a minimum of 4 years including stipend, tuition, and benefits.

ASU is ranked the No.1 innovative university in America (U.S. News & World Report), and the No.1 school in the U.S. in attaining the United Nations Sustainable Development Goals (Time Higher Education). The Geological Sciences graduate program (STEM OPT degree) at the School of Earth and Space Exploration is ranked the 15th in the U.S. (U.S. News & World Report).

### Research topics

We are exploring interactions between human and natural systems, especially at the land-ocean interface using machine learning, global-applicable physical analytical algorithms, big data analysis, and cloud computing. We are striving to explore the influences of human activities on the aquatic systems (oceans, rivers, and lakes) to protect the Earth's resources (coral reef, freshwater, fishes) and archive a more sustainable future. Our current research focuses include but not limited to:

- Global coastal environment monitoring via new satellite data and other complex big data.
- Global inland freshwater quality and biogeochemistry monitoring through the field and remote measurements.
- Understanding and managing the impacts of human-driven climate change on aquatic ecosystem.

Our lab is located at a new high-performance research building (ASU ISTB7, <https://cfo.asu.edu/ISTB7>).

### Students' qualifications

- Students with bachelor's and/or master's degrees in quantitative disciplines such as earth science, ocean science, atmospheric science, environmental science, remote sensing, GIS, ecology, computer science, applied math, or other closely related fields.
- Be responsible and self-driven; be willing and able to learn new skills; strong communication skills.
- Strong programming skills (e.g., Python, R, Matlab, and Linux environment) are desirable, but not required.
- Experiences with machine learning and Google Earth Engine are desirable, but not required.

### Mentoring philosophy

Students will primarily work with Dr. Li to finish each milestone of the Ph.D. program. Students are expecting to involve in a renowned global project (The Allen Coral Atlas <https://allencoralatlas.org/>). Students will also have opportunities to collaborate with faculties and researchers at ASU and other institutes. Students are encouraged to develop their research projects within the lab's research themes and become independent scholars.

### How to apply?

Interested students should submit a formal application through the School of Earth and Space Exploration (<https://sese.asu.edu/admission/graduate-admission>) by Oct. 1, 2021 (Spring, 2022 admission) or Jan. 15, 2022 (Fall, 2022 admission). Students are strongly encouraged to contact Dr. Jiwei Li ([jiweili@asu.edu](mailto:jiweili@asu.edu)) before the application with an email subject of "Prospective Ph.D. students NAME" including CV, unofficial transcripts, TOEFL (at least 80), or IELTS (at least 6.5) scores (if English is not the first language), research statement which describes previous research experiences and future interested topics at ASU.

