

## Fully Funded Ph.D. Positions in Geospatial Data Science and Environmental Health Science at Pennsylvania State University

The [Gong Lab](#) in the [Department of Biobehavioral Health](#) and [Institute of Computing and Data Sciences](#) at [Pennsylvania State University](#) is seeking 1-2 motivated Ph.D. students with research interest in Geospatial Data Science, Environmental Health Sciences, and Spatially Integrated Social Science to join the team. Successful candidates will work with [Dr. Xi Gong](#) on his ongoing research projects, which include but not limited to the following key areas:

- (1) **Environmental Exposure Assessment:** Employ spatial modeling, GeoAI, and other pertinent methodologies, integrating environmental monitoring, meteorological, topographical, and wearable device data to accurately assess and predict environmental pollution exposure across spatiotemporal scales.
- (2) **Environment and Health:** Analyze and model the combined effects of environmental exposure, climate change, and social factors on health and wellness across the entire human lifespan, while also examining related disparities.
- (3) **Spatiotemporal Big Data Analytics and Visualization:** Develop spatiotemporal data mining algorithms, GeoAI and machine learning methodologies, as well as visualization tools to uncover patterns and facilitate knowledge discovery in big data, thereby addressing interdisciplinary challenges.
- (4) **Social Sensing:** Utilize multi-source spatiotemporal big data and employ machine learning, AI, text mining, network analysis, and spatial statistics to detect and analyze human behavior and social dynamics, aiming to address real-world challenges.

### Ph.D. Position Qualification and Application:

- A bachelor's or master's degree in Geography, GIScience, Environmental Science, Statistics, Computer Science, Public Health, Epidemiology, or a related field.
- Strong quantitative skills (e.g., spatial analysis and modeling) and programming experience.
- Good written and oral communication skills in English. Preference will be given to candidates with experience of good-quality publications in the relevant field.
- Strong motivation, work ethic, and ability to work in an interdisciplinary team environment.
- We offer competitive funding packages for 5 years to all students who maintain good standing.
- Ph.D. positions will **begin in Fall 2026**. Application due date: **Dec 1, 2025**
- For details about our innovative and interdisciplinary Ph.D. Program, please visit [bbh.hhd.psu.edu/graduate](http://bbh.hhd.psu.edu/graduate) and refer to the attached flyer.
- Interested applicants are strongly encouraged to email Dr. Gong at [gonglab.psu@gmail.com](mailto:gonglab.psu@gmail.com) with a single attachment that includes their CV, a brief statement of research interests and experience, and, if available, writing samples, coding samples, and/or unofficial transcripts.

More information about Dr. Xi Gong and Gong Lab can be found at <https://xigong.wordpress.com>.

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