# Ms. Xun Gong

(608)-621-8362 <u>xgong56@wisc.edu</u> 4725 Sheboygan Ave, Madison, WI

### **EDUCATION BACKGROUND**

## **University of Wisconsin-Madison**

[Expected Graduate Day] May. 2025

Master of Science: Cartography and Geographic Information Science (GIS), Accelerated, Non-thesis. 3.83/4.0

Previous Study: Anhui Agriculture University

Anhui, China

Bachelor of Agriculture in Forestry (Sino-Foreign Cooperation)

2018.9-2022.7

### **INTERNSHIP EXPERIENCES**

**Xuancheng Aerospace Hongtu Information Technology Co., Ltd.** (40hours/W) 2022.10-2023.1 Supervisor: Weilin Chen, Department of Technology

- Analyzed problems and worked with teams to develop solutions.
- Participated in building some 3D models of the forestry system smart platform.
- Design thematic maps such as the zoning map of the natural disaster comprehensive risk and natural disaster comprehensive prevention and control.

#### **GISPP Fellow in Cart Lab**

2024.8-2025.1

- Designed three detailed greyscale maps of Miami Nation territories, utilizing georeferencing techniques.
- Produced a high-resolution DEM map of White Sands, New Mexico, integrating precise elevation data to enhance geographic analysis.
- Built Interactive Campus Map to visualize research cores at UW-Madison.

### RESEARCH EXPERIENCES

# Core Member, Research on the Remote Sensing Estimation of Camellia Oleifera LAI based on GF-2 and Terrestrial Hyper-spectral (National-level Projection)

2021.02-2021.08

Supervisor: Xuehai Tang, Associate Professor, Forest Manager Teaching and Research Group of Anhui Agricultural University

- Conducted the field investigation and data collection in the early stage of the project, data processing, model building and analysis in the middle, and wrote the final report at the end.
- Implemented the field survey, collected experimental data and brought them back to the laboratory for screening and processing, and made correlation analysis on parameters such as canopy spectrum and LAI accordingly.
- **Achievement**: 1)Provincial 3<sup>rd</sup> prize, the 11<sup>th</sup> GIS Skills Competition for College Students in Anhui Province, China. 2)A unpublished thesis.
- Methods: vegetation index, spearman correlation, Pearson correlation analysis, BP neural network, decision tree construction model

Team Leader, Spectral Response Study of Camellia Oleifera Leaves' Nutrients based on Ground-

### based Hyperspectral Remote Sensing

2019.10-2022.03

Supervisor: Xuehai Tang, Associate Professor, Forest Manager Teaching and Research Group of Anhui Agricultural University

- Selected the research area, determined the main research topic and content, and assigned team members' tasks.
- Identified plans and resources required to meet project goals and objectives.
- Extracted spectral features parameters, analyzed the leaf nutrient, and reported the progress of the experiment regularly to the professor.
- Methods: multiple regression analysis, regression curve, sensitivity analysis.

**Teacher's Assistant** 2021.02-2021.08

### **Course: Forest Geographic Information System**

- Conducting lab sessions in applying GIS software and demonstrating GIS tools.
- Assisting with course preparation, including lectures, assignments, lab exercises, and assessments that related to GIS concepts and tools.
- Supporting students in their research projects, offering guidance on research design, data collection, and analysis.

### **COURSE PROJECT EXPERIENCES**

Economic Forest Planning and Resources Inspection in Mazongling Forested Area 2021.07-2021.09

- Collected the DBH (diameter at breast height) and tree height data to measure the growth of trees in a sample area; collected soil samples and brought them back to the laboratory to analyze and evaluate soil fertility.
- Measured the data of canopy spectrum and leaf nitrogen, learned about the relationship between these two elements, and established a simulation estimation model.
- Obtained remote sensing images using the UAV, carried out the georeferencing based on field visits and made thematic topographic maps according to different classification indicators.

### Old Town Community Planning in Hefei, Anhui Province

2019.09-2020.09

- Replanned the green spaces and houses in the old town community in the Feidong Area with Remote Sensing Technology.
- Monitored the green spaces in the old town community with the Hyperspectral Technology, and registered and proofread remote sensing images that are already acquired with Envi software.

### **OTHER SUPPORTING IFNROMATION**

- Languages: Chinese (Native), English (High proficiency)
- **Professional Skills**: Python, Matlab, ArcGIS pro, Envi, AutoCAD.