Mengyu Liang

ge69fer@mytum.de • +49 175 5245406 • Arcisstr. 21 • Munich, Germany, 80333

Education

Technical University of Munich(TUM)

Cartography

Munich, Germany

Master of Science, October 2017 - Present

University of Wisconsin – Madison (UW-Madison)

Madison, WI, USA

Cartography/GIS (Geographic Information System) and Geography Bachelor of Science (Honors), September 2013- May 2017 Overall GPA: 3.87/4.00

Honors and Awards: Dean's List (7 semesters), Welton Summer Sophomore Research Apprenticeship Grant (\$2000),

College of Letters and Science General Scholarship (\$500), L&S Honors Summer Senior Thesis Grant

(\$3000), UW-Madison Cartography Lab Annual Design Challenge Honorable Mention,

Department of Geography - Kohn Award (\$750), Olmstead Achievement Award in Geography department

Research Experience

Data Science/Visualization Technician

2016 - 2017

Department of Agricultural and Applied Economics, UW-Madison

- Program Python tools to extract and analyze large geocoded datasets related to agricultural practices from web-based **APIs**
- Independently navigate web-based statistical visualization library, Altair, to organize, classify data and produce aesthetic data visualization results
- Collaborate with one faculty and three other student programmers to analyze data and build models based social science and economic theories

Paleogeography Data Analyst

2016

Paleogeography Lab, Department of Geography, UW-Madison

- Communicate with faculty and researchers to gather datasets and articles on North America paleo pollen counts
- Collaborate with multiple researchers across disciplines and campuses to update Neotoma Paleoecology Database
- Conduct data management and databasing tasks independently and provide timely updates to faculty members

Remote Sensing Imagery Analysis Research Assistant

2016

Center for Sustainability and Global Movement, Nelson Institute, UW-Madison

- Work closely with faculty and a team of graduate/undergraduate students on a multidisciplinary NASA-funded project studying land cover land use change in Southeast Asian cities
- Apply dense-time-stack technique on 50+ Landsat satellite imagery to select training data for land use categorization
- Utilize supervised support vector machine, a machine learning algorithm, to classify the land use types

Research Assistant and Lab Technician

2014 - 2016

Geomorphology Lab, Department of Geography, UW-Madison

- Conduct field sampling work and laboratory experiments to analyze Minnesota soil sample
- Work closely with Dr. Joseph Mason and Graduate students to practice innovative method on analyzing soil aggregates
- Organize and achieve soil samples and experiments data using Excel

Work and Volunteer Activities

Volunteer Web-based Mapping Designer

2016 - 2017

Antarctic Meteorological Research Center, Space Science & Engineering Center, UW-Madison

- Acquire and archive real-time and existing Antarctic meteorological data using UNIX system
- Utilize JavaScript to design a web-based interactive map to present the active research activates and extreme natural conditions of McMurdo station in Antarctica

GIS and Cartography Academic Coach

Division of Diversity, Equity & Education Achievement, UW-Madison

Provide academic support by designing extracurricular activities and study materials to enhance student's understanding of cartographic and GIS principles

Skills

Programming: Python, HTML/CSS, Javascript, R, Command Line

Software: Adobe Illustrator, Adobe Photoshop, ArcGIS, QGIS, Mapbox, GitHub, ENVI, Microsoft Suite Language: Chinese (advanced), English (advanced), Japanese (intermediate), German (beginning)