# Sarigai (Rose) Sarigai

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#### **EDUCATION**

University of New Mexico Albuquerque, NM PhD in Geographic Information Science August 2020 - present

Eastern Michigan University Ypsilanti, MI Master of Science in Geographic Information Science December 2019 Overall GPA 3.88 Heilongjiang University Harbin, China

Bachelor of Engineering in Hydrology and Hydropower Engineering July 2016

### RELEVENT EXPERIENCE

**University of New Mexico** Albuquerque, NM Research Assistance Fall 2020-present

#### University of New Mexico/GeoAIR Lab Albuquerque, NM Fall 2020-present Research Assistance

- Support research project of using geospatial artificial intelligence for image analysis
- Literature review
- Gather data related to assigned project
- Python and JavaScript programing
- Use both qualitative and quantitative methods to analyze data
- Use (advanced) machine learning and data mining technologies to derive insights from gathered data and information

### American Association of Geographers, 2019 Annual Meeting

Washington, DC Presenter 04/05/2019

Presented "Analysis on Urban Black and Odorous Water" as part of session titled "Geographic Studies of Water Quality and Management"

### Eastern Michigan University/IGRE

Research Assistance

Ypsilanti, MI

Intern for NSF Grace (GIS Resources and Applications for Career Education) Project May 2018 - August 2018

- Trained high school students in ArcGIS Online & ArcGIS Pro
- Overseen high school students by email in GIS training
- Liaison between EMU's IGRE center & high school site contact
- Maintained and developed Grace project official website
- Granted license to high school students and Geometers via Grace database

#### Eastern Michigan University, Institute of Geospatial Research and Education

Ypsilanti, MI Fall 2017-present

- Analyze socioeconomic data and environmental data using R, SPSS and Microsoft Excel
- Mapping using ArcMap, ArcGIS Online and ArcGIS Pro
- Image processing using ArcGIS

### Eastern Michigan University, Department of geography and Geology

Ypsilanti, MI

Graduate Assistance/ Teaching Assistance

Fall 2017 - Winter 2018

- Helped students with ArcGIS, QGIS and other software used in class
- Assisted student's coursework and projects in class and weekly office hours
- Graded the students' weekly homework

### **Inner Mongolia Grassland Survey and Planning Institute**

Field Work Assistant

Xilinhot, China Summer, 2017

- Assisted in plant investigation by quadrat method
- Participated in UAV spectrometer experiment (Application of hyperspectral data in grassland investigation and ecological monitoring)

Field Work Assistant Summer, 2016

Assisted in annual grassland investigation by quadrat method

#### **PUBLICATION**

• Sarigai, Ji Yang, Alicia Zhou, Liusheng Han, Yong Li, Yichun Xie, Monitoring urban black-odorous water by using hyperspectral data and machine learning, Environmental Pollution, Volume 269, 2021, 116166, ISSN 0269-7491, https://doi.org/10.1016/j.envpol.2020.116166.

#### **SKILLS**

#### Language

Mongolian (Native, proficient in writing in both traditional Mongolian script and Cyrillic Mongolian Alphabet) Chinese (Native)

English (Fluent in speaking; proficient in writing)

Korean (Elementary proficiency)

#### **Technical Skills**

- Proficient in ArcPro, ArcCatolog, ArcMap, ArcGIS Online, Story Mapping
- Basic skill in ERDAS Imagine
- Coding skill in R, SPSS, Python, Java Script, HTML/CSS
- Proficient in AutoCAD
- Skilled in Microsoft Excel, Microsoft Word, Microsoft Power Point

#### **TRAINING**

### Michigan Sustainability Cases, Galaxy Sustainability Learning Exchange

2018, Ann Arbor, Michigan

- Trained on various kind of skills need for a case study
- Worked with environmentally minded people from different background on sustainability case studies
- Worked on the case study of "The degradation of Hulun Lake, Inner Mongolia, China"

### **Heilongjiang University**

Senior's Intern program

2016, Hubei, China

- Trained at the center of the South-North Water Transfer Project located in Handan, China
- Trained at the developing center of Gezhou Dam in Hubei, China
- Trained at The Three Gorges Dam in Hubei, China

Engineering Geology Practice

2014, Beidaihe, China

• Strengthened academic knowledge as well as to integrated faultlessly between theory and practice by collecting in situ data and field internship.

### **LEADERSHIP ACTIVITIES**

## 2019 ArcGIS Online Competition for US HS+MS Students

Co-leader

Ypsilanti, Michigan January 2019 - June 2019

- Communicated with geo-mentors and teachers
- Evaluated and judged students' work

### Mongolian Association of Heilongjiang University

Vice President

- Designed and organized Mongolian cultural events
- Planned and organized annual meetings and annual parties

2014-2015, Harbin, China