## 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

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 MexicoAlbuquerque, NMResearch AssistantFall 2020-present

# University of New Mexico/GeoAIR LabAlbuquerque, NMResearch AssistantFall 2020-present

- Support research project of using geospatial artificial intelligence for image analysis
- Literature review
- Gather data related to assigned project
- Python and JavaScript programming
- 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 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

Presenter

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

Research Assistant

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 Assistant/ Teaching Assistant

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, JavaScript, 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