



EDUCATION

Master of Science in Data Science

Michigan State University, East Lansing, MI
Expected Graduation May 2025

Bachelor of Science in Geographic Information Science and Cartography

Michigan State University, East Lansing, MI
Graduation: December 2019
Minor: Mathematics and Economics

PROFESSIONAL/WORK EXPERIENCE

GIS Analyst and GIS Developer2020-2023

Hydrosimulatics, Inc

Overview:

Conducted spatial data analysis and created detailed maps for various projects. Collaborated with cross-functional teams, including hydrologists, environmental scientists, and software developers to provide GIS support for environmental and water projects, and to deliver higher-quality GIS solutions. Automated data processing workflow using Python and other programming languages, significantly reducing manual calculation time and improving consistency in results.

Data Analysis/Processing and Classification

- Processed extensive datasets of water wells, ensuring accurate and reliable classification of lithologic materials (borehole lithology) by utilizing QGIS and python.
- Calculated the thickness of various lithologic layers within borehole using custom python scripts integrated with QGIS software.
- Conducted regular data validation and quality checks to ensure data integrity and compliance with the company standards for better integration.
- Verified and managed python dependencies required for advanced spatial analysis and geo statistical computations.

Web Mapping Service Development

- Led the development of a cutting-edge web mapping environment platform designed to provide environmental georeferenced data on a global scale. Utilized modern web technologies and GIS platforms and created an intuitive and user-friendly interface for accessing worldwide environmental geospatial data and enhanced user mapping and data visualization experience.
- Manipulated and extracted data from various web mapping services (WMS), web features services (WFS), and web coverage services (WCS), and Web mapping tile services (WMTS) to support environmental and hydrological internal projects.



Undergraduate GIS Research Assistant
Landscape Ecology & Ecosystem Science Lab

Summer 2019

Overview

Assisted in Data collection and analysis for ecological search projects within the LEES Lab, providing essential support to researchers. Produced detailed maps and visualization to support search findings, aiding in the interpretation and representation of ecological data.

Data Processing and Classification

- Utilized Pix4D and ArcGIS software for processing and orthorectification of sub-watershed historical imagery to use them for land use and land cover classification.
- Employed eCognition software for advanced land cover and land use classification, contributing valuable insights to ecological research within the LEES Lab.
- Developed efficient workflow for image processing, ensuring consistent and reliable data transformation.

Field Work

- Assisted in the maintenance and operation of over seven radiation towers in crop fields, measuring albedo and monitoring crop health to gather critical data for ecological studies.
- Used GPS devices to conduct field surveys, identifying and collecting data from more than 30 plots within crop fields
- Measured key parameters such as vegetation height, leaf area index, soil moisture, and nitrogen concentration levels to understand the photosynthetic activity and soil moisture and properties. Collaborated with researchers to interpret data and integrate findings into broader ecological studies, contributing to the advancement of knowledge in Landscape Ecology & Ecosystem Science Lab.

Enrollment Assistant/Orientation Leader

Fall 2017

MSU Academic Orientation Program

- Played a crucial role in helping international students transition smoothly to American campus life, offering guidance and support to ensure their comfort and integration.
- Helped students navigate cultural differences, understand campus norms, and feel welcomed in their new environment.
- Provided a welcoming environment for incoming students
- Helped them set up a foundation for a successful college career, also guided them through essential campus resources, including housing, counseling services, and extracurricular activities.
- Assisted them to enroll to classes by providing detailed information about course offerings, prerequisites.

SKILLS AND ABILITIES

- GIS and Remote Sensing Software (ArcMap, QGIS, eCognition, Pix4D)
- SQL & NoSQL Database Management (PostGIS, MySQL, Firebase)
- Web and Desktop\Mobile Application development (Python, CSS, HTML, JS, TS, Angular Framework)
- R & RStudio Language
- Mathematics and Geostatistics\Statistic



LANGUAGES

- Portuguese Fluent
- English Fluent
- Spanish Basic

AWARD & SCHOLARSHIP

- Outstanding Performance Award - English Program at MSU
- Sonangol Full Ride Scholarship, Fall 2014
- MSU Dean's List

Spring 2016 to Fall 2019

ORGANIZATIONS & EXTRACURRICULARS

- The National Society College Scholars, Member
- SLA, Member
- Ango Spartan Student Association, Member

2017
2017
2018