ZHIYI LI

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SUMMARY

- Aspiring Cartographer/GIS Analyst/Data Scientist
- Using ESRI GIS products to do spatial analysis and data visualization
- Using JavaScript and Python to design web application and build tools for batch processing

EDUCATION

M.S. in University of Wisconsin - Madison, Cart/GIS major   Aug 2024
- Current GPA: 4.0/4.0
- Cartography, GIS, Web and Mobile Programming (JavaScript, Python), Geodatabase, Remote Sensing

B.S. in University of North Alabama, GIS major   Dec 2022
- Institution GPA: 3.91/4.0; Overall GPA: 3.65/4.0; Honors: Summa cum laude
- GIS, Web GIS, Physical Geography, Remote Sensing, Quant Method in Geography (SPSS), MySQL, Python

WORK AND VOLUNTEER EXPERIENCE

Madison Police Department, Student GIS Assistant   Jun 2024 - Aug 2024
- Helped develop a public GIS interactive tool for 911 data query using ESRI Experience Builder, improving response efficiency and community safety

Dreame Technology Ltd., Human Resources Intern   Jul 2020 - Aug 2020
- Handled the recruitment process for structural and software test engineer positions, including job postings and screening candidates
- Supported the interview process by coordinating schedules and assisting with candidate evaluation

COMMUNITY WORK
- Assisted and volunteered in the Earth Hour activity of Yangzhou University   Mar 2021
- Volunteered in China's poverty alleviation campaign for human rights   Mar 2021
- Conducted research on the impact of the epidemic on the economy of the industry   2020

PERSONAL SKILLS

- **GIS:** ArcGIS Pro, ArcMap, ArcGIS Online and associated web apps
- **Design and Cartography:** Adobe Photoshop, Adobe Illustrator, Mapbox
- **Programming and Scripting:** Python, Javascript, GitHub
- **Data Analysis and Management:** MySQL, SPSS, pgAdmin4, Excel
- **Remote Sensing and Imaging:** ERDAS IMAGINE, ENVI, CloudCompare
- **Certificates**: SYB entrepreneurship training, Esri ArcGIS online courses

PROFESSIONAL EXPERIENCE

CONFERENCE
2022 Annual Meeting of the SEDAAG   Nov 2022
- Built models in ArcMap and ArcGIS to process precipitation data efficiently
- Conducted correlation and regression analyses to explore relationships between precipitation and bushfires
- Made maps to show changes in monthly precipitation before fire season
- Used vegetation remote sensing parameters to estimate fire damage
- Presented the thesis entitled "***The Precipitation's Influence on Bushfires in the Savanna Climate Zone of Northern Territory, Australia***"

RELEVANT PROJECTS

Madison Crime Incident Map (Accessible [here](#))   Jun 2024 - Aug 2024
- Developed an interactive crime incident map for Madison using JavaScript, HTML, and CSS, enhancing user interface and data visualization
- Implemented core functionalities including dynamic filtering by incident type and date, toggleable map layers, and interactive elements such as pop-ups and collapsible sidebars

Spatial Patterns and Potential Contributing Factors to Air Quality Across U.S. States in 2020   May 2024
- Developed an AQI and Impacted Factors Database to store and manage air quality, economic, and traffic data across various states
- Employed PostgreSQL with PostGIS for data manipulation and performed complex spatial queries to examine the relationships between air quality levels and potential influencing factors like GDP, population density, and traffic metrics
- Conducted a comprehensive assessment to identify spatial patterns and trends in air pollution, providing actionable insights for environmental policy formulation and intervention strategies

FlightTracker Web App (Accessible [here](#))   Apr 2024 - May 2024
- Designed a full stack cloud-based web application
- Provided users with real-time inbound flights info at nearby airports
- Featured a search bar for finding flights from one city to another

Endangered Species Web App (Accessible [here](#))   Apr 2024
- Used d3 and Leaflet library to visualize endangered species in U.S.

Travel Intentions Web App: Global Travel Insights and Analysis Platform (Accessible [here](#))   Mar 2024
- Designed an interactive web map using JavaScript to gather, visualize, and analyze users' travel intentions
- Got responses from Survey123

A story map of immigration in the United States (Accessible [here](#))   Nov 2022
- Made web layers and web maps (symbolized by certain fields, designed pop-ups, add sketches from some countries to the U.S. on the world country map)

Impact of 2022 Hunga Ha'apai Eruption on Tongatapu: Tsunami Damage Analysis   Apr 2022 - May 2022
- Mosaicked the elevation images and used elevation data and the maximum water height of the tsunami to determine the flooded land
- Reclassified land cover types
- Did quantitative assessment to evaluate tsunami damage

Damage Analysis of the 2011 Earthquake of Pacific Coast of Tohoku   Feb 2022 – May 2022
- Made classification maps using Iso Cluster Unsupervised Classification tool in ArcGIS Pro
- Analyzed the damage caused by the earthquake

A Tornado Risk Analysis Tool Based on Alabama's Counties   Oct 2021 - Nov 2021
- Developed a tool in ArcMap using Python
- The tool merges tornado data with county polygons to predict risk levels
- It displays results using color gradients and highlights tornadoes rated EF4 or higher in the last three years

HONORS AND AWARDS

- Feddie Wood Geography Research Grant (a fund of $500)   Oct 2022
- International Student Scholarship and GLC Housing Scholarship, University of North Alabama 2021 - 2022