Yutong Jiang

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EDUCATION

University of Pennsylvania **Aug 2024 – May 2025**

M.S. in Urban Spatial Analytics

University of Wisconsin-Madison **Sep 2020 – May 2024**

B.S. in Cartography & GIS + Geography (People-Environment Subfield) | Minor in Digital Study

The 49th Annual CaGIS Map Design Competition - *Arthur Robinson Award Honorable Mention*

TECH STACK

Coding: Python (Spatial Data Analysis, Google Earth Engine), R, JavaScript (Leaflet, D3, Mapbox), SQL, Html

GIS: ArcGIS suite, QGIS, ENVI, CloudCompare, Meshroom, API - Google Map, OpenStreetMap

Others: Figma, Microsoft Office Suite, Adobe Photoshop/Illustrator/Premiere, Blender

RESEARCH EXPERIENCE

Interactive Geovisualization Development In Presenting Annual Crop Yield Data **May 2023 – Dec 2023**

Spatial Computing and Data Mining Lab | Advisor: Dr. Qunying Huang

- Engaged in creating and optimizing interactive web map visualizations based on Javascript, and leaflet; Enhanced the visualization aspect to include interactive features that allow users to explore and analyze crop yield data efficiently;
- Database Management: Designed, implemented a spatial database for the crop yield modeling and prediction; Developed data mining and analytic functions to extract and deminatee valuable information from the DB, supporting ongoing research and development efforts in the lab;

Experiment Design in AR Navigation for Visually Impaired **Jun 2022 – Oct 2022**

Human Computer Interaction Group | Advisor: Dr. Yuhang Zhao

- Theoretical Research and Literature Review: Engaged in the preliminary theoretical research and conducted a comprehensive literature review to underpin the experimental
- 3D Modeling and AR Integration: Utilized Blender to develop detailed 3D models of various landmarks, subsequently importing these models into Unity to create an immersive AR environment for the navigation system.
- On-Site Wayfinding Experiments: Participated in field experiments with visually impaired participants, meticulously recording key data and contributing to discussions on experimental design and improvement strategies.

WORKING EXPERIENCE

Sinovation Ventures - *Interactive Design Intern* **May 2022 – Jul 2022**

- Collaborated with a team of four to explore the application of AI algorithms using various programming languages.
- Designed a comprehensive twenty-page presentation of the project using Adobe Illustrator, showcasing key findings and methodologies. Produced and recorded a detailed project presentation video. Conducted an online presentation to effectively communicate project results to stakeholders.

Shanghai City GIS Developing Co.,Ltd. - *Data Processing and Management Intern* **May 2021 – Aug 2021**

- Utilized ArcMap and ArcGIS Pro to digitize a printed map and create a digital street map of Shanghai. Combined the digital map with relevant datasets to enhance its accuracy and completeness.
- Using annotated map data to train AI algorithm in identifying map elements and key image recognition.

PROJECTS EXPERIENCE

Evaluating Natural Wildfire Potential Index in California - *Undergraduate Thesis Project* **Jan 2024 – May 2024**

- Evaluates the development of a Natural Wildfire Risk Index (WRI) in Butte County, California, by examining the 2018 Paradise Camp Fire. The study employs methodologies to integrate multiple GIS layers - ncluding land use, vegetation types, population density, and fuel accumulation - to assess wildfire risks in Butte County.
- Create a Wildfire Risk Map of California, offering a nuanced tool for policy makers and emergency services to prioritize fire prevention measures and improve community resilience against future wildfire events.

Interactive Map of Physical Landscape of Nebraska Terrain **Mar 2023 – May 2023**

- Developed an interactive web map using Leaflet.js to visualize Nebraska's elevation data.
- Implemented advanced geospatial techniques to enhance map interactivity and user engagement.
- Designed and customized map layers, markers, and popups for a comprehensive and informative user experience. Integrate geographic elevation data into shapefilezhi and use Leaflet to present the changing trend of elevation data on the interactive web map.