

Yixuan(E) Zhao

yzhao72@buffalo.edu | (716) 808-0794 | linkedin.com/in/yixuan-zhao72 | yzhao72.github.io/Home

EDUCATION

Master of Science in GIS (STEM Majors with 3-Years OPT Work Authorization),

Expected June 2023

Master of Urban Planning and Design,

June 2022

University at Buffalo, The State University of New York

Honor: Academic Excellence Potential Financial Aid Awards

Related courses: GIS Design; GIS Applications; GIS and Machine Learning; Fundamentals of AI; Web Application Development; Information System Development; Spatial Data Science; Land Use and Physical Planning

Bachelor of Science in Interior Design,

May 2020

University of Bridgeport, Bridgeport, CT

Honor: President's List; Academic Merit Award.

Related courses: Revit Building Design and Development; Simulation Modeling; Ergonomics; Building Structure & US Building Code; Virtual Reality and Modeling; CAD Drawing

SKILLS

GIS Skills: ArcGIS Enterprise/Online/Pro/Map; ArcGIS API for Python/Js; PostGIS; OpenLayers; Geoserver; ENVI

Languages: Python; JavaScript; HTML; CSS; R

Data Management: BigQuery; MySQL; PostgreSQL; SQLite; MongoDB

Web Development: React; Node; Django; Bottom

Tools: Jupyter; Visual Studio Code; GeoDa; Git; TensorFlow2

Design: AutoCAD; Revit; Adobe PS/AI/ID; Rhino@GH; Lumion; SketchUp; Unreal Engine

WORK EXPERIENCE

Researcher, Urban Analytics Lab, UB PLAN & DESIGN, Buffalo, NY,

January 2022 - Present

- Research application of emerging information system theory and method technology in urban planning, and complete three technology application research work.
- Maintain one laboratory website and database, Manage data collection, cleaning data, exploring data, and proposing research plans.

Teaching Assistant, University at Buffalo, Buffalo, NY,

January - June 2022

- Prepared and optimized course content to help 30+ students learn theoretical and technical methods of spatial analysis and environmental design.
- Guided students to use ArcGIS Pro 3D Landscape Viewshed Analysis & Spatial Data Visualization analysis methods and Rhino/GH Parametric design methods to produce final projects with urban design theory.

PROJECTS

Flash Your Room -- WEB Cloud Native Hardware Automation System,

November - November 2022

- 2022 Full UB 24th Hacking Challenge & Serverless Awards Candidate - Serverless Summit 2022
- Designed and implemented Web hardware control system in 4-person team using React, Python and AWS serverless services in 24 hours.

Crowdsourcing Geographic Location Information Collection System,

September - December 2022

- Tech Stack: Leaflet; React; Node.js; Express; MongoDB
- Designed and developed a Web crowdsourcing geographic location information collection system.
- Enabled users to quickly understand or share information about geographical features, population, events, traffic, etc. in a specific area.
- Supported crowdsourcing data collectors to quickly collect, store, process, and analyze geographic data based on online collaborative work.

Imagining a Post-Highway Future in Buffalo, NY,

August - December 2021

- Led a team of two architects and two planners to transform a large highway entrance on Buffalo's Lower West Side into an urban hamlet.
- Generated a map of land use environment analysis, understand historical form of neighborhood around downtown Buffalo, as well as location of amenities for development planning and design scheme based on Rhino & GH and ArcGIS Pro.

Suitability Analysis to Establish COVID-19 Mass Vaccination Sites,

January - May 2021

- Investigated fairness and accessibility of spatial distribution of COVID-19 vaccination sites in Buffalo.
- Applied ArcGIS mapping and spatial analysis techniques to optimize location of vaccination sites based on relationship between spatial distribution of existing vaccination sites and vulnerable communities.