

# ZILE WU

wuzile98@outlook.com | wuzile@desgin.upenn.edu  
267-249-4784

## EDUCATION

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**University of Pennsylvania** Sept 2022 - Expected May 2023  
Master of Urban Spatial Analytics Philadelphia, PA

- Selected Relevant Courses: Public Policy Analytics, Geospatial Cloud Computing & Visualization, MUSA/ Smart Cities Practicum, Introduction to Housing, Community and Economic Development

**Tongji University** Sept 2015 - June 2021  
Bachelor of Architecture Shanghai, China

## EXPERIENCE

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**MS. Candidate, Urban Spatial Analysis** Sept 2022 - Present  
University of Pennsylvania Philadelphia, PA

- Building a proof-of-concept analytical and informational system to incorporate risk or frequency estimates of future eviction filings alongside other descriptive metrics using R, HTML/css/Javascript. Providing decision-making aids so that resource allocation decisions by the client and stakeholders can be made in a more proactive manner to reduce the risk of potential evictions at a property level.
- Developed an online story map to tell the status of evictions in Philadelphia and made a prediction of eviction risk based on geo-spatial data using Iso Cluster Unsupervised Classification in Arcgis Online at a census tract level.
- Wrote a time token algorithm using R to help the City of San Francisco better evaluate and utilize the existing dynamic pricing policy. i.e., to be able to predict and regulate the occupancy rate of parking spaces through dynamic pricing and various spatial and temporal factors to ensure the availability of parking.

**Research Assistant** Aug 2021 - Aug 2022  
National key research and development project, Tongji University Shanghai, China

- Wrote a raster classification algorithm based on the historical satellite image data to identify different types of rasters at the resolution of 10m
- Developed a land change model based on 5-year satellite data for 8 national villages using CA-Markov model at the resolution of 10m. The actual and expected landscape richness of each village was assessed using information entropy.
- Released 1000 questionnaires of village spatial index system for experts and scholars designed with SP method. To summarize the composition method of the spatial index system of villages and towns.

**Urban Design/Architecture Intern** Sept 2020 - Jan 2021  
Yao Dong Research Office & Office for Urban Renewal(OUR) Shanghai, China

- Wrote a grasshopper script to render a Graduation group photo based on individual photos, simulation environment and true environment during epidemic period when graduates can't meet offline
- Collaborate with the construction team, deepen the community center renewal program in Xuhui, Shanghai

## LEADERSHIP ACTIVITIES

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**Aging in Place Design Workshop** July 2021 - Aug 2022  
Organizer/ Staff Shanghai, China

- Responsible for pre-study communication and negotiation in nursing homes.
- In charge of Workshop evaluation process design and venue reservation and time management.

**Shanghai Live Rock Series** Sep 2017 - May 2019  
Organizer/ Band member/ Drummer Shanghai, China

- From 2017 to 2019, organized 10+ band shows and platters at 5+livehouse in Shanghai with 10+ bands from different places.
- Performed in 2018 Strawberry Music Festival, Modern Sky Lab, Shanghai, China; 2019 Eastern Sea Festival.

## SPECIALIZATIONS / SKILL-SET

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- Geo-Spatial Analytics** Satellite Image based Raster Analysis | Environmental Modeling
- Statistical Analytics** Predictive Modeling in R | Classification and Regression analysis | Machine Learning
- Programming** R | Python | HTML/CSS/Javascript | SQL
- Data Wrangling** Data Manipulation in R/Python | Web Scraping | Twitter API | ArcGIS Pro
- Urban Planning** Urban Design | Urban Economics | Space Syntax
- Architecture** Design & Project Management | AutoCAD | Rhino | SketchUp | Adobe Suite CC