# Ling Chen

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Website Portfolio: https://lingchenurban.cargo.site/

Urban Planner fusing passion for Geospatial Analytics and Innovative Urban Solutions

#### EDUCATION

**University of Pennsylvania**, Weitzman School of Design, Philadelphia, PA *Master of City and Regional Planning, Certificate: GIS and Spatial Analysis* 

Relevant Courses: Smart Cities Practicum, Public Policy Analytics, Geospatial Machine Learning in Remote Sensing, Geospatial Data Science in Python, Statistical & Data Mining Methods, Modeling Geographical Objects, Land Use & Environmental Modeling

# Tongji University, College of Architecture and Urban Planning, Shanghai, China Bachelor of Engineering in Urban Planning: Urban and Rural Planning

#### **RELEVANT EXPERIENCE**

#### Planning Intern, WRT | Philadelphia, PA

- Conducted GIS spatial analyses, socio-economic, accessibility analyses as foundational research for multiple planning projects.
- Used Rhino & Adobe Suite to develop strategies and diagrams for seven transit-oriented redevelopment areas in City of Trenton.
- Crafted spatial strategies and renderings for the Hoboken Housing Redevelopment Plan using GIS & Adobe Suite. Focus areas included project phasing, mobility, land use, site design, building standards, open spaces, recreational facilities, and circulation.

#### Public Policy Analytics, UPenn | Predicting Delays for NJ Transit Commuters

- Conceptualized an analytical framework and created predictive models in R for real-time train delays up to three hours ahead, incorporating spatial autocorrelation, serial, and time lag effects, and evaluated performance across various time frames.
- Determined use case for NJ transit commuters, offering instant predictions and an interactive user interface.

#### Smart Cities Practicum, UPenn | A Data-Driven Planning Framework for Curbside Loading Zones

- Worked with the City of Philadelphia on a proof-of-concept data framework and interactive platform for curbside loading zones, leading the back-end modeling and engaging in bi-weekly client alignment meetings.
- Conducted detailed exploratory analyses of pilot data and implementing machine learning models to predict curb zone demands.
- Designed a web application, from wireframing to deployment, tailored to meet client specifications for product development.

#### Geospatial Machine Learning in Remote Sensing, UPenn | Deep Learning for Urban Spatial Analysis Jan 2024 – May 2024

- Launched a project inspired by remote sensing studies, using ArcGIS Pro and Computer Vision to derive street assessment indicators from both subjective and objective perspectives, aiming for a comprehensive understanding of urban spaces.
- Leveraged Python-based machine learning techniques and deep learning libraries to analyze urban environments through street view images, delivering finely detailed, human-centric geospatial insights and solutions.

#### Geospatial Data Science in Python, UPenn | Urban Resiliency in Hong Kong

- Employed geopandas, web scraping, osmnx, and rasterio for spatial analysis of temperature, NDVI, socio-economic, characteristics and Landsat 8 satellite imagery of Hong Kong, focusing on heat distribution and environmental impact.
- Applied Scikit-learn for cluster analysis, identifying districts with commonalities and resilience to urban heat challenges.

#### Planning and Design Studio, UPenn | Design for an Equitable Future in Philadelphia's Chinatown

- Analyzed historical features of Philadelphia's square system to integrate and revitalize public spaces and connect to Chinatown.
- Developed high density mixed-use parcel typologies to meet underserved goals in Chinatown & the needs of young professionals.
- Extracted crash & open space data to identify and restructure mobility systems to confront negative influence of infrastructure.

#### LEADERSHIP & VOLUNTEER EXPERIENCE

## Curriculum Design Team Leader, Support Teaching & Building Activities | Loufan, Shanxi, China July 2019

• Built an urban-rural cultural awareness curriculum for instructing local middle school students through interactive engagements.

#### SKILLS

**Toolkit:** ArcGIS Pro, R, Python, Microsoft Excel, Adobe Illustrator, Adobe InDesign, Auto CAD, Rhino, Sketch-Up, SQL, GitHub **Skillset:** Geospatial Analysis, Data Visualization, Machine Learning, Deep Learning, Urban Planning, Remote Sensing, Branding **Language:** English (Fluent), Mandarin (Native)

#### Oct 2023 – Dec 2023

Jan 2024 – May 2024

#### Oct 2023 – Dec 2023

Sept 2022 – Jan 2023

### June 2023 – Nov 2023

June 2022

May 2024