Yongming Huang

www.yongminghuang.com

Yongming Huang is a Master student at Architecture and Environmental Design Field, Major of Art and Environment, Arts Studies, Graduate School, Kyoto University of The Arts. Bachelor's degree from College of Communication and Art Design, University of Shanghai for Science and Technology (USST). His research involves the use of big data and machine learning interdisciplinary techniques in the analysis of spatial elements in the field of architecture and urban boundaries. His research was accepted and qualified for the abstract sessions of EDRA, ACSP and IFLA 2024.

2-116 Kitashirakawa Uryuzancho, Sakyo Ward, Kyoto, 606-8271.y-huang2166@st.kyoto-art.ac.jp . 08059206951

Main Research Themes

Space quality and vitality | The interdisciplinary application of big data and machine learning technologies to analyze the association between built environment and street vitality.

Spatial morphology and human activity patterns | The study of spatial morphology and human activity patterns reveals how various architectural and urban forms influence interactions and behaviors with space.

Human-nature Interaction and Wellbeing | Exploring the dynamic relationships between humans and urban natural environments to enhance mental and physical health.

Education

KYOTO UNIVERSITY OF THE ARTS — Kyoto, Japan

Master Student, Architecture and Environmental Design Field, Major of Art and Environment, Arts Studies, Graduate School — April 2023 - Present

Research Cluster: Architecture and urban design

UNIVERSITY OF SHANGHAI FOR SCIENCE AND TECHNOLOGY — Shanghai, China

Bachelor of Art in Environmental Design — Jun 2019

The program completed in 4 years, Outstanding Graduate

Academic and Professional Experience

Researcher & Head of Coordination | Nature AI Lab — Vancouver, Canada

Academic Research, Literature Collection, Data Analysis and Visualization, and Coordination of Work — May 2024 – Present

Adjunct Teaching Fellow | University of Shanghai for Science and Technology — Shanghai, China

Technical Support and Academic Thesis Advising — Jan 2024 – Present

Skills

Computational Design and Landscape Architecture Rhino | Grasshopper | SketchUp | Lumion | V-Ray

Spatial Data Analytics ArcGIS Pro | ArcGIS | QGIS

Data Statistics and Visualization Python | R Studio | SPSS

Algorithms Python | NumPy |OpenCV

Adobe Photoshop | InDesign | Illustrator | Premiere

Publications

Peer-reviewed Articles

8. ***SCI:*** **Huang, Yongming***., Shen, Maoting., Zhang Weiying**.** Exploring thr relationship between the similarity of built environment and the heterogeneity of street vitality: In Shanghai Historic Districts. (In Work…)

7. ***SCI:*** Cai, Yuxuan*, **Huang, Yongming**., Chen, Anzhi**.,** Wen, Yuhan. Comparative Study of Public Behavior and Perception Changes in Commercial and Natural Park Area Before and After the Pandemic. (In Work…)

6. ***SCI:*** **Huang, Yongming**., Cai, Yuxuan*., Chen, Anzhi**.,** Wen, Yuhan. Non-liner Impact of environment and human perception on Urban Visiting Patterns. ***Urban Forestry & Urban Greening*** (Submitted)

5. ***SCI:*** Wang, Zhanzhu., Shen, Maoting., **Huang, Yongming***. The Relationship Between Color Combinations of Building Facades and Visual Quality: Combining Eye-Tracking Technology and Subjective Evaluation. ***Applied Sciences*** | https://www.mdpi.com/2076-3417 /14/18/8227

4. ***SCI:*** **Huang, Yongming**., Du, jiani., Chen, Mingze*. Assessing the spatial-temporal impact of landscape elements on urban vitality in Vancouver: A social media and GPS data approach. ***Applied Geography*** (Under Review)

3. ***SCI:*** Wang, Zhanzhu., Shen, Maoting., **Huang, Yongming***. Exploring the Impact of Facade Color Elements on Visual Comfort in Old Residential Buildings in Shanghai: Insights from Eye-Tracking Technology. ***Buildings*** | https://doi.org/10.3390/buildings14061758

2. ***SCI:*** Chen, Mingze*., **Huang, Yongming**., Zhen, Yuqiao., Du, jiani. Defining urban vitality using image-based, text-based, and GPS data. ***Nature cities*** (Under Review)

1. ***SCI:*** **Huang, Yongming.,** Chen, Mingze*. State of the art technologies in street vitality analytics: A systematic review. ***Heliyon*** (Under Review)

Conference

2024

Huang, Yongming., Cai, Yuxuan*., Chen, Anzhi., Wen, Yuhan. Non-liner Impact of environment and human perception on Urban Visiting Patterns. | ***2024 CELA*** (Council of Educators in Landscape Architecture) Submitted

Chen, Mingze., **Huang, Yongming***., Zheng, Yuqiao., Du, Jiani. Defining Urban Vitality Using Text-based, Image-based, and GPS Data | ***2024 ACSP*** (Association of Collegiate Schools of Planning) Conference Abstract (Accepted)

Chen, Mingze., **Huang, Yongming***., Zheng, Yuqiao., Du, Jiani. Evaluating Urban Vitality with Big Data across 10 Global Cities | ***2024 IFLA*** (International Federation of Landscape Architects) Conference Abstract (Accepted)

Chen, Mingze., **Huang, Yongming***., Zheng, Yuqiao., Du, Jiani. Evaluating Urban Vitality with Big Data: Insights from Social Media and GPS Data across 10 Global Cities | ***2024 EDRA*** (Environmental Design Research Association) Conference Abstract (Accepted)

Reviewer of Journal Manuscripts

Sustainable Cities and Society | Plos one

Leadership Experience

UNIVERSITY OF SHANGHAI FOR SCIENCE AND TECHNOLOGY LANDSCAPE LAB

Leader

Technical and SCI Paper Guidance Course
Jan 2024 – Present
| Workshop of paper writing, technology development, data analysis and visualization.

Skills & Certificates

Technical:

GIS, R Studio, Grasshopper, Python, SPSS Statistic

-Adobe Series (PS, AI, ID, PR), AutoCAD
-Modelling: Rhino, SketchUp, Vray, Lumion
-Microsoft Word, PPT, Excel

Language: Mandarin, Japanese and English

Certificates

- BIM Project Manager | **MIIT**
- National Computer Innovation Technology advertisement design high level | **MOHRSS**
- BIM Level 1 Modeler | **MOHRSS**
- N1 145 | **JLPT**
- 99 | **TOEFL**
- 780 | **TOEIC**

Professional Affiliations

Member | Environmental Design Research Association (EDRA)