

# Jian Li

Ph.D. OF ARCHITECTURE, INDUSTRIAL DESIGN AND CULTURAL HERITAGE

University of Campania Luigi Vanvitelli, Aversa, IT 81031

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## Education

### University of Campania Luigi Vanvitelli

Ph.D. ARCHITECTURE, INDUSTRIAL DESIGN AND CULTURAL HERITAGE

• Co-Advisors: Massimiliano Masullo, Dr. Luigi Maffei

• Thesis: Towards a Human-Centered Approach for the Multisensory Design of Urban Park

Aversa, IT

Feb. 2020 - Mar. 2024

### Southwest University

M.S. FUNDAMENTAL PSYCHOLOGY (COGNITION DIRECTION)

• Advisor: Dr. Quanhong Wang

Chongqing, CN

Sep. 2013 - Jul. 2016

### Beijing Wuzi University

B.S. LOGISTICS MANAGEMENT

• Courses: Transportation Management; Supply Chain; Operations Research

Beijing, CN

Sep. 2009 - Jul. 2013

## Research Experience

### Harbin Institute of Technology-Shenzhen-Dept of Architecture

ADVISORS: BIAO YANG

- Research project: "3D modeling, lighting simulation and verification of the integrative lighting design for traffic tunnels"
- Research project: "Potential influencing factors of the commercial signage at night on visual comfort of pedestrians"

Shenzhen, CN

Aug. 2023 - Present

### University of Campania Luigi Vanvitelli

CO-ADVISORS: MASSIMILIANO MASULLO, LUIGI MAFFEI

- Research project: "Multisensory investigation for elderly-centred design of common living urban environments"
- Thesis: "Towards a Human-Centered Approach for the Multisensory Design of Urban Park"

Aversa, IT

Feb. 2020 - Mar. 2024

### Hong Kong Polytechnic University-Dept of Building Environment and Energy Engineering

ADVISORS: CHI-KWAN CHAU

- Visiting PhD Program: "Using Augmented Sound Installations for Noise Masking in a Campus Green Space"

Hong Kong

Aug. 2022 - Nov. 2022

### Harbin Institute of Technology-Shenzhen-Dept of Architecture

ADVISORS: BIAO YANG

- Research project: "Urban lit environment health diagnosis and road lighting energy saving research"
- National project: "Research on the impact mechanism of dynamic lighting on visual perception constancy in healthy light environment"

Shenzhen, CN

Sep.2018-Jan.2020

### Southwest University - Dept of Psychology

ADVISORS: QUANHONG WANG

- Research project: "EEG research on the recognition process of symmetry perception"
- Research project: "Cognitive research on the recognition process of Chinese character based on fMRI"
- Thesis: "The processing mechanism of symmetry visual perception under the condition of oblique symmetry: two ERP re-searches on SPN components"

Chongqing, CN

Sep.2013-Jul.2016

## Publications

### PUBLISHED

Li, J., Masullo, M., Maffei, L., Pascale, A., Chau, C.K. & Lin, M., 2024. Improving informational-attentional masking of water sound on traffic noise by spatial variation settings: An in situ study with brain activity measurements. Applied Acoustics, 218, p.109904.

- Li, J.**, Maffei, L., Pascale, A., Masullo, M., Lin, M., & Chau, C. K. 2023. Road traffic noise informational masking with water sound sequences: From laboratory simulation to field study. *The Journal of the Acoustical Society of America*, 153(3\_supplement), A233-A233.
- Masullo, M., Cioffi, F., **Li, J.**, Maffei, L., Ciampi, G., Sibilio, S., & Scorpio, M. 2023. Urban Park Lighting Quality Perception: An Immersive Virtual Reality Experiment. *Sustainability*, 15(3), 2069.
- Masullo, M., Cioffi, F., **Li, J.**, Maffei, L., Scorpio, M., Iachini, T., ... & Ruotolo, F. 2022. An Investigation of the Influence of the Night Lighting in a Urban Park on Individuals' Emotions. *Sustainability*, 14(14), 8556.
- Li, J.**, Maffei, L., Pascale, A., & Masullo, M. 2022. Effects of spatialized water-sound sequences for traffic noise masking on brain activities. *The Journal of the Acoustical Society of America*, 152(1), 172-183.
- Li, J.**, Maffei, L., Pascale, A., & Masullo, M. 2022. Effects of the spatialisation of water-sounds sequences on the perception of traffic noise. *Vibrations in Physical Systems*, 33(1).
- Jiang, X., **Li, J.**, & Yang, B. 2021. Luminance and saliency have impact on pedestrians' fixation distribution during natural walking: Evidence from mobile eye-tracker. *Lighting Research & Technology*, 53(4), 359-372.

## IN PREP

- Li, J.**, Meng, Y., Yang, B. 2024. Potential Influencing Factors of the Commercial Signage at Night on Visual Comfort of Pedestrians. *Building and Environment*.
- Li, J.**, Masullo, M., Maffei, L. 2024. The Designing and Perception of the Multisensory Settings in Urban Park through Virtual Reality Technology and Neuro-Psychological Measurement. *Building and Environment*.

## Presentations

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\* *presenting author*; + *mentored undergraduate*

### CONTRIBUTED PRESENTATIONS

- Masullo M., Cioffi F., **Li, J.\***, Maffei L., Iachini T., Ruggiero G., Ruotolo F. 2023. Traffic noise mitigation in urban multisensory environments: a virtual reality approach to urban sound planning. Oral presentation: IFAU23 IV International Forum for Architecture and Urbanism Climate Change and Cultural Heritage, Caserta, Italy.
- Li, J.\***, Maffei, L., Pascale, A., & Masullo, M. 2022. Using spatialized water sound sequences for traffic noise mitigation: correlation analysis of subjective evaluation and neural measurements. Online presentation: 24th International Congress on Acoustics, Gyeongju, Korea.
- Li, J.\***, Masullo, M., & Maffei, L. 2020. Using Eye Tracking to Investigate the Audio-Visual Effect of Landscape Perception: A Research Review. Online presentation: INTER-NOISE and NOISE-CON Congress and Conference Proceedings, Seoul, Korea.
- Wu, C., Yuan, X., **Li, J.\***, Yang, B., 2019. Visual Comfort Evaluation Method and Prediction Model Relating to Discomfort Glare: a Mock-up Study of Luminous Environment in Airplane Cockpit, Oral presentation: CIE 2019, Washington DC, USA.

## Teaching Experience

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Fall 2015	<b>Representation and computation in working memory</b> , Teaching Assistant	<i>Dept of Psychology</i>
Spring 2015	<b>Visual Cognition</b> , Teaching Assistant	<i>Dept of Psychology</i>
Fall 2014	<b>Representation and computation in working memory</b> , Teaching Assistant	<i>Dept of Psychology</i>
Spring 2014	<b>Visual Cognition</b> , Teaching Assistant	<i>Dept of Psychology</i>

## Working and Mentoring

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2016-2018	<b>Eye tracking, EEG and fNIRS methodology and applications in neuroscience studies,</b> neuroscience engineer, ShangHai PsyTech Electronic Technology Co., Ltd	Shanghai
2016	<b>EEG research methodology and data analysis in MATLAB with EEGLAB toolbox,</b> neuroscience engineer, Guiyang College of Traditional Chinese Medicine	Guiyang
2015	<b>fMRI data analysis workflow with FreeSurfer in Linux and SPM in MATLAB,</b> student, Dept of Psychology, Southwest University	Chongqing
2014	<b>EEG data analysis workflow with EEGLAB toolbox in MATLAB,</b> student, Dept of Psychology, Southwest University	Chongqing

## Awards, Fellowships, & Grants

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2017	<b>Excellent Employee of the Year,</b> ShangHai PsyTech Electronic Technology Co., Ltd	Shanghai
2016	<b>the First Prize Scholarship,</b> Southwest University	Chongqing
2015	<b>the First Prize Scholarship,</b> Southwest University	Chongqing
2014	<b>the First Prize Scholarship,</b> Southwest University	Chongqing
2011	<b>National Encouragement Scholarship,</b> Beijing Wuzi University	Beijing
2010	<b>National Encouragement Scholarship,</b> Beijing Wuzi University	Beijing

## Professional Development

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### RESEARCH SKILLS

- Rich experience in experiment design and data analysis in acoustical research, lighting research and multi-sensory research with scientific measurement and technology, including the use of binaural dummy head, SLM, Astro Spatial Audio system, digital audio programming, luminance meter, photometer, integrated with advanced neuroscience and behavior devices including eye-tracker, EEG, fNIRS, etc.;
- Full grounded computer science knowledge and practical experiences, ability to use MATLAB, Python, R, etc. to complete experimental data acquisition and analysis;
- Experienced in general machine learning algorithms for clustering and classification within deep learning frameworks, and proficient in statistical analysis techniques, such as ANOVA, PERMANOVA, LM, GLM, and time series analysis;
- Familiar with in 3D modeling workflows and light simulation utilizing Blender and Unreal Engine, encompassing PBR-based modeling and photogrammetry-based modeling techniques.

### DEVELOPMENT

**Workshop** Participated: the 1st Southwest University Psychology and Brain Science Academic Summer School, Chongqing

**Workshop** Participated: the 2nd Southwest University Psychology and Brain Science Academic Summer School, Chongqing

**Workshop** Hosted: EEG Workshop in the 1st China Academic Symposium on "Cognition and Brain Regulation", Shanghai

**Workshop** Hosted: EEG Workshop in the 2nd China Academic Symposium on "Cognition and Brain Regulation", Shanghai