

Name ZHENG Jianyi

Gender Male

Professional Class-1 registered architect, China

Registered urban and rural planner,

Qualification China

Registered architect, Macao SAR

Research Field Urban Morphology and urban

regeneration, Healthy urban form,

Smart Heritage

Academic Qualifications

2011 - 2017	Ph.D in Urban Planning and Design, School of Architecture, South China
	University of Technology, China
2003 - 2006	Master of Engineering in Architectural History and Theory, School of
	Architecture, Huaqiao University, China
1998 - 2003	Bachelor of Architecture, Department of Architecture, Huaqiao University,
	China

Teaching Experiences

2023.7 - now	Associate Professor, supervisor for MArch, PhD
2018–2023.6	Assistant Professor, supervisor for MArch, PhD
2018 - 2020	Assistant Professor, supervisor for Master of Arts
2015 - 2016	Visiting Scholar sponsored by CSC scholarship, School of Geography, Earth and Environmental Sciences, University of Birmingham, UK Supervisor: Prof. J.W.R. Whitehand
2015 - 2017	Supervisor for Master of Architecture, Huaqiao University
2009 - 2017	Lecturer, School of Architecture, Huaqiao University
2006 - 2008	Teaching Assistant, School of Architecture, Huaqiao University

Representative Publications

Research Articles:

- [1] **Zheng J**. & Wu B. (2018). The Effect of Spatial Transformation: Remolding Macao's Urban Spatial Productivity in an Era of Post World Cultural Heritage, *Architectural Journal*, 598(07), 99-104. doi:CNKI:SUN:JZXB.0.2018-07-021.
- (Included in China Urban Renewal and Development Report 2018-2019, edited by China Society of Urban Sciences)
- [2] **Zheng J.** (2019). The Cultural Reconstruction and the Dilemma of the Architectural Cultural Heritage Conservation in Macao's Post-era of World Cultural Heritage, *World Architecture*, 353(11), 44-49. doi:10.16414/j.wa.2019.11.012.
- [3] **Zheng J.**, Li J., Liu G. & Fei Y. (2018). Macao's Inner Harbor Waterfront Revitalization Based on the Model of Functional Wetland Reclamation, *Chinese Landscape Architecture*, 34(07), 91-97. doi:CNKI:SUN:ZGYL.0.2018-07-017.
- [4] Zheng J. (2022). Development and Evolution of Macao Urban Industrial Space Based on the Perspective of Economic Transformation, *Journal of Urban and Regional Planning: Special Issue on Macao*, 2022: 44-57.
- [5] Zheng, L.; Chen, Y.; Yan, L.; **Zheng, J**. The Impact of High-Density Urban Wind Environments on the Distribution of COVID-19 Based on Machine Learning: A Case Study of Macau. *Buildings* 2023, 13, 1711. (SCIE, Q2, corresponding author)
- [6] He, J.; Chen, Y.; Zheng, L.; **Zheng, J**. Research on Wind Environment and Morphological Effects of High-Rise Buildings in Macau: An Example from the New Reclamation Area around Areia Preta. *Int. J. Environ. Res. Public Health* 2023, 20, 4143. (SSCI&SCIE, Q1, corresponding author)
- [7] Yang, X.; Zheng, L.; Chen, Y.; Feng, J.; **Zheng, J**. Recognition of Damage Types of Chinese Gray-Brick Ancient Buildings Based on Machine Learning—Taking the Macau World Heritage Buffer Zone as an Example. *Atmosphere* 2023, 14, 346. (SCIE, Q2, corresponding author)
 [8] Zheng L, Chen Y, Jiang S, Song J and **Zheng J**(2023). Predicting the distribution of COVID-19 through CGAN—Taking Macau as an example. *Front. Big Data* 6:1008292. (ESCI, Q2,

corresponding author)

- [9] Chen, Y.; Zheng, L.; Song, J.; Huang, L.; **Zheng, J**. Revealing the Impact of Urban Form on COVID-19 Based on Machine Learning: Taking Macau as an Example. *Sustainability* 2022, 14, 14341. (SCI&SSCI, Q2, corresponding author)
- [10] CHEN Yile, ZHENG Liang, **ZHENG Jianyi**. Parametric Landscape Sightline Analysis Method and its Application Research: Taking Macau as an Example[J]. *South Architecture*, 2023(1): 97-106. (CSCD, corresponding author)
- [11] **Zheng J.**, Zhao Y. & Zhang Q. (2018). Fractal Characteristics in Macao's Townscape based on the Three Elements of Plan-Analysis, *South Architecture*, 183(01), 110-116
- [12] **Zheng J.**, Fei Y. & Liu G. (2015). Node-axis Urban Renewal: St. Lazarus Parish Area, Macao, *Planners*, 31(05), 66-72.

Books:

- [1] **Zheng J**., Fei Y. (Ed(s)). (2018). Integration of Urban Revitalization and Tourist Routes Expansions in Macau, Nanjing: Southeast University Press.
- [2] **Zheng J.** (2021). The Art of Tangjiawan traditional architecture, Guangzhou: Guangdong People's Publishing House.

China Patent for Invention

[1] Zheng Jianyi, Zhao Yunqiang. (2017). A kind of urban morphology analysis management-control method based on plane general layout three elements and fractal calculation, China, ZL201710252232.X.

Conference Proceedings:

[1] Sou, S.I., **Zheng, J**. (2023). Research on Inclusive Design Strategy to Enhance Accessibility in Global Ageing: A Case Study of the Public Housing Wayfinding Design in Macau. In: Mostafa, M.,

Baumeister, R., Thomsen, M.R., Tamke, M. (eds) *Design for Inclusivity*. UIA 2023. Sustainable Development Goals Series. Springer, Cham. https://doi.org/10.1007/978-3-031-36302-3_22

- [2] **Zheng, J.**(2016). East—west comparisons and Conzenian concepts: the case of traditional urban cores. In *23nd International Seminal on Urban Form (ISUF)*, Nanjing
- [3] Wang, D., & **Zheng, J**. (2018, April). Comparison of urban form based on different city walls between Quanzhou and Newcastle upon Tyne. In **24th ISUF International Conference. Book of Papers** (pp. 167-175). Editorial Universitat Politècnica de València.

[4] Jiang S., Chen Y., Zheng L., **Zheng J**. (2022). Comparison analysis on typical historic cultural districts with AI machine learning technology- taking Portuguese and Macao districts as examples, 29th International Seminal on Urban Form (ISUF), ŁÓDŹ – KRAKÓW

Research Projects

2014 - 2016	PI, Research on the morphology of modern Macao residential regions
	influenced by ethnics group of Fujian-Guangdong, funded by National
	Natural Science Foundation of China (NSFC Project No.51308232)
	主持完成國家自然科學基金項目 (NSFC) 《閩粤族群影響下的澳門近
	代居住形態研究》(51308232)
	Co-PI of sub-project 3, A study on the Interaction and influence of Eastern
	and Western architectural cultures during the one-port only trade period in
	Guangzhou, funded by 2021 the special academic team project of
2021 - 今	unpopular unique knowledge of the National Social Science Fund of
2021 - 7	China (Project No. 21VJXT011)
	2021 年度國家社科基金冷門絕學研究專項學術團隊項目"廣州一口通
	商時期東西方建築文化交互影響研究"子課題3聯合負責人(編號
	21VJXT011)
2024 – 2025	PI, AI detection technology and equipment research and development for
	the damage types of Chinese traditional grey-brick walls in Macao, funded
	by the Science and Technology Development Fund (FDCT)
	澳門科學技術發展基金(FDCT)科技創新提升計劃《澳門傳統中式
	建築青磚牆體損傷智能檢測技術和設備研發》(0080/2023/ITP2)
	PI, Study on the buffer space of Macao spillover epidemic prevention
2020 - 2021	based on the daily life circle of Zhuhai-Macao commuters, funded by
	Higher Education Fund Macao SAR (HSS-MUST-2020-9)

	主持澳門特別行政區政府高等教育基金預防及應對重大傳染病研究專
	項 HSS-MUST-2020-9《基於珠澳通勤者日常生活圈的澳門外溢防疫
	緩衝空間研究》
	PI, Research on the optimization of accessibility service in the museums,
2021/12-2021/2	funded by the Cultural Affairs Bureau, Macao SAR.
	主持澳門文化局研究項目《博物館無障礙服務優化研究》
	PI, Research and Surveys on Spacial Environment of Schools in Macao
2018/1 – 2018/12	2018, funded by Education and Youth Development Bureau Macao
2016/1 – 2016/12	SAR.
	主持完成澳門教青局《2018 澳門學校空間環境調查研究》
	PI, Analysis on morphological areas and urban conservation and
	regeneration modes for the old cities in southern Fujian, funded by
2016 - 2019	Provincial Natural Science Foundation of Fujian (No. 2016J01238)
	主持完成福建省自然科學基金面上項目《閩南舊城區城市形態區域化
	分析及其保護更新模式》(編號 2016J01238)
	Participant, Field survey and cultural study on Macao's traditional Chinese
	building Wei and Li, funded by the Cultural Affairs Bureau, Macao
2020	SAR.
	参與澳門文化局項目 《對全澳圍里進行記錄及其文化價值之研究工
	作》
	Participant, Research on the ports of Macao's inner-harbor, funded by the
2021	Cultural Affairs Bureau, Macao SAR.
	參與 澳門文化局項目 《澳門內港碼頭研究》

Awards

2023, Silver Award, Competition of Public art and equipments in Lai Chi Van plot X11-X15, hosted by Cultural Affairs Bureau, Macao SAR

2021, First prize of the second LA Young Scholar Thesis Award, "Parametric Landscape Sight Analysis method and Its Application: A Case study of Macao" (corresponding author), hosted by the journal of Landscape Architecture.

2020, First prize of the concept design of barrier-free walking system in Mongha Municipal Park Macao, hosted by the Municipal Affairs Bureau (IAM) of the Macao Special Administrative Region (Macao SAR) and Architects Association of Macau.

Exhibition

The 9th Bi-City Biennale of Urbanism\Architecture (UABB) Qianhai Subvenue, Chief Planner for the theme exhibition area of Ocean-graphical literature

Academic memberships

- Vice-director, Hong Kong-Zhuhai-Macao Station of the Key Scientific Research Base of Application of Spatial Information Technologies in Cultural Heritage Conservation (Tsinghua University), National Cultural Heritage Administration (NCHA)
- Member, Urban Morphology Research Group, University of Birmingham
- Member, ICOMOS CHINA
- Member of Board of Directors, Architects Association of Macau (AAM)
- Member of Board of Directors, World Association of Chinese Architects (WACA)

Design Projects

- Restoration of the Zhuhai historical building 'Ancestral Hall of Tang Baochen', Zhuhai,
 Guangdong Province
- Restoration of No.5 folk house at Yatang Lane, Zhuhai, Guangdong Province
- Restoration of Villa de Bosco, Macao SAR
- Main campus gate building, Huaqiao University, Xiamen, China
- West campus gate building, Huaqiao University, Xiamen, China
- Wangyuanxing International Convention Center, Huaqiao University, Xiamen, China
- Art Building, , Huaqiao University, Quanzhou, China