吴偲

博士在读

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生日：**1992.03.31**

研究方向：**城市形态 / 城市仿真 / 机器学习 / GIS / 规划决策系统**

教育经历

特文特大学 ITC 学院 / 城市分析博士
2020.01 至 2024.06 (预计) / 荷兰
- **课题：** 基于空间数据的城市设计形态分析和模拟的模式语言方法
- **导师:** Dr. Menno-Jan Kraak，Dr. Jiong Wang，Dr. Mingshu Wang

新加坡国立大学 Urban Analytics Lab / 访问学者
2024.01 至 2024.06 (预计) / 新加坡
- **课题:** 理解社区行人动态：基于计算机视觉的可步行性和街道网络分析
- **导师:** Dr. Filip Biljecki

伦敦大学学院高级空间分析中心 CASA / 智慧城市与城市分析硕士
2018.09 至 2019.09 / 伦敦
- **课题：** 新加坡总体规划分析：通过空间网络分析检测和预测城市空间结构和多中心性
- **导师:** Dr. Duncan Smith

新加坡国立大学建筑系 / 建筑学学士（荣誉）
2012.07 至 2016.10 / 新加坡
- 四川自贡绿色核心与带概念规划和城市设计，中国自贡（2016）
- 国际学生交换项目 – 明治大学，日本东京（2015）
- 亚洲城市研讨会 – 曼谷湄南河东岸复兴，泰国曼谷（2014）

工作经历

东海集团 Sea Group / 用户体验设计师
2016.12 至 2018.07 / 新加坡
- 将产品需求转化为模型和 UI/UX 设计
- 设计餐厅日常绩效和后台运营分析的数据可视化平台

伍兹贝格 Woods Bagot / 实习城市设计师
05/2015 - 08/2015, BEIJING
- 对北京城市设计项目进行全面概念和场地研究
- 启动区概念设计和建模

发表论文

期刊论文

- **Wu, C.** * , Wang, J. , Wang, M. , & Kraak, M. J. (2024). Machine learning-based characterisation of urban morphology with the street pattern. *Computers, environment and urban systems*, 109, 102078. **(JCR Q1, IF: 6.8)**

- **Wu, C.** , Wang, Y., Wang, J., Kraak, M. J., & Wang, M.* (2024). Mapping Street Patterns with Network Science and Supervised Machine Learning. *ISPRS International Journal of Geo-Information*, 13, 114. **(JCR Q2, IF: 3.4)**

- **Wu, C.** , Smith, D. , & Wang, M.* (2021). Simulating the urban spatial structure with spatial interaction: A case study of urban polycentricity under different scenarios. *Computers, environment and urban systems*, 89, 1-13. **(JCR Q1, IF: 6.8)**

- **Wu, C.** , Wang, M.* , Smith, D., Wang, J. , & Kraak, M. J. "Local Hubs and Global Gateways": Understanding the Impact of Singapore's master plan on urban polycentricity. *Environment and Planning B: Urban Analytics and City Science*. **(JCR Q2, IF: 3.5, 第二轮在审)**

- **Wu, C.** * , Wang, J. , Wang, M. , Biljecki, F. , & Kraak, M. J. Formalising the urban pattern language: A morphological paradigm towards understanding the multi-scale structure of cities. *Cities*. **(JCR Q1, IF: 6.7, 在审)**

- Zhao, W. , Li, M.* , **Wu, C.** , Zhou, W. , & Chu, G. (2022). Identifying urban functional regions from high-resolution satellite images using a context-aware segmentation network. *Remote sensing*, 14(16), [3996]. **(JCR Q1, IF: 5.0)**

会议论文

- **Wu, C.** *, Wang, J. , & Kraak, M. J. (2023). Urban spatial structure from a street network perspective: mapping street patterns with random forest classification. In S. Sangiambut (Ed.), *The 18th International Conference on Computational Urban Planning and Urban Management (CUPUM) 2023*

- **Wu, C.** *, Wang, J. , Wang, M. , & Kraak, M. J. (2024). Evolving Urban Landscapes: A Spacematrix and Clustering Approach to understanding the morphology of Singapore's HDB Estates. *The Association of Geographic Information Laboratories in Europe (AGILE) 2024*

待投论文

- **Wu, C.** , Wang, J. , & Zhao, W.* . Enhancing Digital Literacy in Urban Planning: Leveraging GeoAI and OpenStreetMap Data for Building Form Analysis. (预计 2024.07.30)

- **Wu, C.** , Ito, K. , & Zhao, W. **&** Biljecki, F. * . Understanding the neighbourhood's pedestrian dynamic with computer vision-based walkability and street network analytics. (预计 2024.10.30)

* 通讯作者

荣誉奖项

- **Association of Geographic Information Laboratory in Europe (AGILE) Grant,** 2024
- **Dutch Assistant in Opleiding (AIO) Scholarship**, 2020-2023
- **NUS Awards for Study Abroad – NASA Enhancement Scholarship,** 2014, 2016
- **Japanese Student Service Association (JASSO) Scholarship** 日本留学奖学金, 2015
- **Singapore Ministry of Education Senior-Middle 1 (SM1) Scholarship,** 2008-2011

教学经验

特文特大学 ITC 学院

- 202001419-1A Course 1: GIS and RS or Geospatial Solutions / 小组课题导师, 2021,2022
- 202001419-1A Course 2: Geospatial Data: Concepts, Acquisition and Management / 助教, 2020-2023
- 202001419-1A Course 3: Geospatial Analysis and Interpretation / 助教, 2020-2023
- HTHT GIS Minor, / 助教, 2020

讲座汇报

会议

- Association of Geographic Information Laboratory in Europe (AGILE), Glasgow, 2024 / **Oral Presentation**
- The 18th International Conference on Computational Urban Planning and Urban Management (CUPUM), Montreal, 2023 / **Oral Presentation**
- The 16th Spatial Behaviour and Planning Research Conference, Online, 2020 / **Oral Presentation**

讲座

- College of Architecture and Arts, Hunan University of Science and Technology, Xiangtan, China, 2023
- Urban Analytics Lab, National University of Singapore, Singapore, 2021

组织活动

- Association of Geographic Information Laboratory in Europe (AGILE), Glasgow, 2024 / **Program Committee, Reviewer**
- International Geoscience and Remote Sensing Symposium (IGARSS), Brussels, 2021 / **Session Moderator**
- Computer, Environment and Urban Systems / **Reviewer**
- Transactions in GIS / **Reviewer**
- Asian Geographer / **Reviewer**

专业技能

编程及数据科学

Python, R, JavaScript, SQL, HTML/CSS, ABM, GIS, Machine Learning, Deep Learning, Network Analysis

设计和可视化

Sketch, Photoshop, Illustrator, Sketchup, Rhino, AutoCAD