

Han Wang

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EDUCATION

Peking University

2020.09 – (Expected)2023.06

- Master's Student in **Cartography & Geographical Information Science**
- GPA 3.76 / 4.00 · Rank 2 / 18
- Supervisor: Prof. Zhou Huang & Prof. Yu Liu

Wuhan University

2016.09 – 2020.06

- B.Eng. in **Remote Sensing Science and Technology**
- GPA 3.87 / 4.00 · Rank 3 / 262
- Supervisor: Prof. Zhipeng Gui

PUBLICATIONS

DouFu: A Double Fusion Joint Learning Method for Driving Trajectory Representation

Han Wang, Zhou Huang*, Xiao Zhou, Ganmin Yin, Yi Bao

10.1016/j.knosys.2022.110035

Knowledge-Based Systems(IF=8.14)

GWRBoost: A geographically weighted gradient boosting method for explainable quantification of spatially-varying relationships

Han Wang, Zhou Huang*, Ganmin Yin, Yi Bao, Xiao Zhou, Yong Gao

10.48550/arXiv.2212.05814

Arxiv preprint

Identifying spatiotemporal characteristics and driving factors for road traffic CO2 emissions

Xiao Zhou, Han Wang, Zhou Huang*, Yi Bao, Guoqing Zhou, Yu Liu

10.1016/j.scitotenv.2022.155270

Science of The Total Environment(IF=10.75)

iTourSPOT: a context-aware framework for next POI recommendation in location-based social networks

Lin Wan, Han Wang, Yuming Hong, Ran Li, Wei Chen, Zhou Huang*

10.1080/17538947.2022.2122611

International Journal of Digital Earth(IF=4.61)

Evaluating the human use efficiency of urban built environment and their coordinated development in a spatially refined manner

Yi Bao, Zhou Huang*, Linna Li, Han Wang, Jiayuan Lin, Gang Liu

10.1016/j.resconrec.2022.106723

Resources, Conservation & Recycling(IF=13.72)

High-resolution quantification of building stock using multi-source remote sensing imagery and deep learning

Yi Bao, Zhou Huang*, Han Wang, Ganmin Yin, Xiao Zhou, Yong Gao

10.1111/jiec.13356

Journal of Industrial Ecology(IF=7.20)

Site selection for hybrid offshore wind and wave power plants using a four-stage framework: A case study in Hainan, China

Xiao Zhou, Zhou Huang*, Han Wang, Ganmin Yin, Yi Bao, Quanhua Dong, Yu Liu

10.1016/j.ocecoaman.2022.106035

Ocean & Coastal Management(IF=4.30)

ConvGCN-RF: A hybrid learning model for commuting flow prediction considering geographical semantics and neighborhood effects

Ganmin Yin, Zhou Huang*, Yi Bao, Han Wang, Linna Li, Xiaolei Ma, Yi Zhang

10.1007/s10707-022-00467-0

GeoInformatica(IF=2.77)

Quantifying spatially-varying impacts of public transport on NO₂ concentrations with big geo-data

Han Wang, Xiao Zhou, Hao Guo, Quanhua Dong, Zhou Huang*

Under review

Big geodata revealed spatial patterns of built environment stocks across and within cities in China

Zhou Huang*, Yi Bao, Ruichang Mao, **Han Wang**, Ganmin Yin, Lin Wan, Houji Qi, Qiaoxuan Li, Hongzhao Tang, Qiance Liu, Linna Li, Bailang Yu, Qinghua Guo, Yu Liu, Huadong Guo, Gang Liu*

Under review

PROJECTS

Implement pre-sorting methods before GiST index building 2021.06 – 2021.10

Google Summer of Code · OSGeo · PostGIS

- Use space filling curves to sort items and construct GiST from the bottom up to speed up the building process
- GitHub: <https://github.com/postgis/postgis/pull/619>
- Wiki: <https://trac.osgeo.org/postgis/wiki/ImplementSortingMethodsBeforeGistIndexBuilding>
- Presentation at FOSS4G 2021: https://youtu.be/Jjgghz_EzWQ?t=706

Automatic driving strategy and practice research 2019.07 – 2019.08

Deecamp 2019

- Build a toy self-driving vehicle system with a team
- Ray · Unity ML Agents · Real-world Experiments
- Demo: <https://www.bilibili.com/video/BV154411D7nq>

Compressed neural network for violence detection from CCTV 2018.05 – 2020.07

Team Leader · National Training Program of Innovation and Entrepreneurship for Undergraduates[201810486085]

- Assemble a team to use artificial intelligence to identify violent actions in school scenes

EXPERIENCE

Graduate Research Assistant 2020.09 – present

Peking University

- Focus on spatial-temporal data analysis & management
- Investigate and improve spatial models for environmental and urban studies
- Leverage deep learning techniques to tackle human mobility and urbanization problems

Teaching Assistant 2021.09 – 2022.01

Peking University

- Teach C programming language and algorithms with an online judgment system

Software Development Intern 2020.06 – 2020.09

Esri R&D Center Beijing

- ECG Signal capture and processing
- Identify human health status by investigating patterns of ECG signal
- Develop a mobile APP prototype

SELECTED HONOR & AWARDS

Finalist, AAG GISS-SG Student Honors Paper Competition 2023

Merit Student of Peking University 2022

Scholarship of Excellent Student 2021

Award for Academic Excellents 2021

First Honor Graduate Student of Wuhan University 2020

Liu Daoyu Scholarship for Creative Learning 2019

First place, The 4th "NavInfo Cup" Mapping Skills & Innovation Competition 2018

Kwang-Hua Scholarship 2018

Meritorious Winner, COMAP's Mathematical Contest in Modeling 2018

Outstanding Student Scholarship 2017

Merit Student of Wuhan University 2017