Yuhan JIANG

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EDUCATION

Wuhan University, M.A. **CHINA, 09/2021- present**

- Department: State Key Laboratory of Engineering in Surveying, Mapping and Remote Sensing
- Major: Cartography and Geographic Information Systems
- Course: Geographic information theory and technology(A+), Aerospace photogrammetry(A), Smart city(A), Natural language processing technology(A), Numerical analysis(A-)

Wuhan University, B.E. **CHINA, 09/2017-06/2021**

- Department: School of Remote Sensing and Information Engineering
- Major: Remote Sensing Science and Technology
- GPA: 3.84/4.0 (Recommended Postgraduate Admission)

Hong Kong Polytechnic University, Summer school **HONGKONG, 06/2019-07/2019**

- Department: Department of Land Surveying & Geo-Informatics
- Course: Mobile Gis & Location based services(A), Spatial Big Data Analytics(B+)

PATENT & BOOK

Open GIS visualization book **Co-author, 06/2021-04/2022**

- As a contributing author, I have co-authored three chapters in this book, namely "Programming Libraries, APIs, and Tools," "Desktop-based Mapping and Visualization Tools," and "Web-based Mapping and Visualization Packages".

Three software copyrights **First Author, 02/2019-04/2021**

- I have successfully developed 3 web applications: the Big Event Information Analysis Platform, the Supply and Demand Exchange Platform and the Chinese Food and Geography Platform.

RESEARCH EXPERIENCE

Map retrieval intention recognition **First Author & Co-author, 06/2021-present**

- Drawing on relevant feedback data, this research endeavours to enhance the retrieval accuracy and assists the discovery and utilization of resources in an intention-driven way. My undergraduate thesis, titled "*WMS Layer Retrieval Intention Recognition Considering Map Features and Semantic Attributes*" was recognized as an outstanding thesis.
- Collaboratively, we developed and implemented MDL-RM, a method that utilizes the Minimum Description Length (MDL) principle and the Random Merging (RM) strategy. I served as the fourth inventor for the patent titled "*A Semantic-aware Method for Geospatial Information Retrieval Intention Recognition.*" Additionally, as the fifth author, we published "*Map Retrieval Intention Formalization and Recognition by Considering Geographic Semantics*" in the Journal of Geo-Information Science.
- Currently, the hypergraph segmentation method is being employed to further optimize this research. The study belongs to the subject of National Nature Science Foundation (41971349).

Spatial analysis of COVID-19 **Second Author, 06/2020-10/2021**

- The study aimed to quantify the spatial differences of COVID-19 cases in Wuhan utilizing social media data (Weibo). To achieve this objective, we employed Kernel Density Estimation (KDE) and Geographically Weighted Regression (GWR) techniques to explore the spatial distribution patterns of COVID-19 cases in Wuhan. Furthermore, we conducted a correlation analysis to investigate the potential relationships between the distribution of COVID-19 cases and environmental factors.
- The paper *"Spatial disparities of self-reported COVID-19 cases and influencing factors in Wuhan, China"* (2nd author) has been published in "Sustainable Cities and Society" (Impact Factor: 10.696).

Robot indoor positioning with fused image and geometric features **Co-author, 06/2020-10/2021**

- The subject proposed an RGB-D high-precision SLAM method integrating visual and geometric features to achieve the large-scale and high-precision indoor 3D detection of robots with RGB-D sensors.

SCHOLARSHIPS & HONORS

- Merit Student of WHU
- National Encouragement Scholarship
- Advanced Individual in Summer Practice
- Outstanding Student Leader
- First-Class Scholarship
- Outstanding Graduate of WHU
- Graduate Freshman Scholarship of WHU
- Interdisciplinary Contest in Modelling, Honourable Mention
- Asia and Pacific MCM, Second Price
- Mathematical Contest in Modelling, Honourable Mention
- The 8th "TipDM Cup" Data Mining Race, Second Prize
- Certificate Authority Cup International Mathematical Contest in Modelling, Second Prize
- Women's Triple Jump Competition, Third Place

SKILLS

- **Languages:** Chinese, English
- **Programming languages:** Python, C/C++, R, Matlab, Java, JavaScript/CSS, SQL
- **Working Software:** PyCharm, IDEA, Matlab, Visual Studio, ArcGIS
- **Others:** National Computer Rank Examination Level 4 Database Engineer