

## CURRICULUM VITAE

### Yue Ma

#### CONTACT INFORMATION

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#### EDUCATION

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**08/2023 – present:** Ph.D. in Geographical Information Science, Department of Geographical Sciences, **University of Maryland**, College Park, MD, USA.

- Advisor: Dr. Xiao-Peng Song

**09/2021 – 05/2023:** M.S. in Geographical Information Science, Department of Geography, **The State University of New York at Buffalo**, Buffalo, NY, USA.

Master Research Project: *Near-Real-Time Forecasting and Change Detection for a Fire-Prone Shrubland Ecosystem*

- Advisor: Dr. Yingjie Hu; Committee member: Dr. Adam Wilson

**09/2016 – 06/2020:** B.S. in Geographical Information Science, **Wuhan University**, Wuhan, Hubei, China.

Thesis Topic: *Risk Analysis of Non-point Pollution in Hubei Province Based on GIS*

- Advisor: Dr. Yan Wang

**09/2016 – 06/2020:** B.Ec. in Finance, **Wuhan University**, Wuhan, Hubei, China.

Thesis Topic: *Research on the Spillover of U.S Dollar Monetary Policy: Rediscussion of the Mundellian Trilemma*

- Advisor: Dr. Jingwen Yu

**07/2019- 08/2019:** Visiting student, **University of St Andrews**, St Andrews, UK.

#### RESEARCH & WORK EXPERIENCE

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**NASA Ecosystem Monitoring for Management Application (EMMA) team**, University at Buffalo – SUNY, USA.

Research Assistant, Sep 2022 - present

- This project aims to develop an operational system and related tools for monitoring the vegetation state of a fire-prone shrubland ecosystem in a global biodiversity hotspot in South Africa
- Built and trained deep-learning models for predicting vegetation dynamics in open ecosystems
- Developing deep learning models for identifying drivers of vegetation anomalies

**GeoAI Lab**, Department of Geography, University at Buffalo – SUNY, USA.

Research Assistant, May 2022 – Jul 2022

- Worked as an active group member and contributed to multiple interdisciplinary projects which involve public health, disaster resilience, and model improvement
- Contributed to two papers as a co-author

#### PUBLICATIONS

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3. Sun, K., Hu, Y., **Ma, Y.**, Zhou, R.Z., Zhu, Y., (2022): Conflating point of interest (POI) data: A systematic review of matching methods. **Computers, Environment and Urban Systems**, 103, 101977.
2. Zhou, R.Z., Hu, Y., Tirabassi, J., **Ma, Y.** & Xu, Z., (2022): Deriving neighborhood-level diet and physical activity measurements from anonymized mobile phone location data for enhancing obesity estimation. **International Journal of Health Geographics**, 21(1), 1-18, <https://doi.org/10.1186/s12942-022-00321-4>.
1. **Ma, Y.**, Hu, Y., Moncrieff, G., Slingsby, J., Wilson, A., Maitner, B., Zhou, R.Z., (2022): Forecasting vegetation dynamics in an open ecosystem by integrating deep learning and environmental variables. **International Journal of**

**HONORS & AWARDS**

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<b>The 3<sup>rd</sup> Place Award of the Student Illustrated Paper Competition</b>	<b>2023</b>
The American Association of Geographers Remote Sensing Specialty Group	
<b>Excellent Graduate Student</b>	<b>2020</b>
School of Resource and Environmental Sciences, Wuhan University	
<b>Outstanding Volunteers of the Military Games</b>	<b>2019</b>
The 7 <sup>th</sup> World Military Games	
<b>Advanced Individuals in the Military Games</b>	<b>2019</b>
The 7 <sup>th</sup> World Military Games	
<b>Third Semester Scholarship</b>	<b>2019</b>
Wuhan University	
<b>Outstanding Exchange Student Scholarship</b>	<b>2019</b>
School of Resource and Environmental Sciences, Wuhan University	
<b>Excellent Student Award &amp; Scholarship</b>	<b>2018</b>
Wuhan University	
<b>Excellent Student Award &amp; Scholarship</b>	<b>2017</b>
Wuhan University	

**SKILLS**

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- **Programming/Scripting Language:** Python, R, JavaScript, C/C++, Matlab
- **Tools/Frameworks/Platform:** Tensorflow, MySQL, Git, Google Earth Engine
- **Software:** ArcGIS, Stata, SPSS, Photoshop, SketchUp, AutoCAD, ENVI, CorelDraw
- **Language:** English, Chinese, Korean

**MAJOR COURSES**

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- Geographical Information System
- GIS and Machine Learning
- Multivariate Statistic in Geography
- Advanced Remote Sensing
- Spatial Data Science