# Kai Ren

Ph.D. Candidate

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## EDUCATIONS

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| Mar. 2023 - Current | *Visiting Research Associate*, GeoSpatial Analysis and Climate Change, School of Design and the Built Environment, **Curtin University**, Australia |
| Sep. 2020 - Current | *PhD Student in Agr.*, Land Resources and Spatial Information Technology, State Key Laboratory of Soil Erosion and Dryland Farming on the Loess Plateau, Institute of Soil and Water Conservation, College of Natural Resources and Environment, **Northwest A&F University**, China |
| Sep. 2016 - Jun. 2019 | *M.S in Sci.*, Cartography and Geographic Information System, Key Laboratory of Virtual Geographic Environment, Ministry of Education, School of Geography, **Nanjing Normal University**, China |
| Sep. 2012 - Jun. 2016 | *B.A. in Sci.*, Geographic Information System, College of Natural Resources and Environment, **Northwest A&F University**, China |

## RESEARCH EXPERIENCE

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| Mar. 2023 - Current | Identifying Climate and Environmental Determinants of Spatial Disparities in Wheat Production Using a Geospatial Machine Learning Model |
| May. 2021 - Mar. 2023 | Temperature Interpolation Inversion in the Loess Plateau |
| Sep. 2020 - Aug. 2022 | Xinjiang Cotton Digital Agriculture Decision Management System |
| Apr. 2017 - May. 2018 | Remote Sensing Monitoring and Early Warning System of Cyanobacteria Bloom in Dianchi Lake |
| Sep. 2016 - Jan. 2017 | Groundwater Vulnerability Assessment in Pizhou City |

## RESEARCH INTERESTS

- Climate Change and Meteorological Element Interpolation
- Remote Sensing, GIS
- Research and Development of Agricultural Management System Software

## WORK SKILLS

- Proficiency in ArcGIS, Erdas and ENVI
- Master programming language Python, R, C and Java
- Proficient in using programming software RStudio, PyCharm, Visual Studio and MATLAB etc.

## COMPUTER COPYRIGHT

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| 2019 | Structural Plane Recognition and Intelligent Analysis System of Layered Geological Body |
| 2018 | Simulation System of Cyanobacteria Bloom Drift in Dianchi Lake |
| | Simulation System of Total Suspended Solids in the Large Water Body |
| 2017 | 3D Modeling and Analysis System of Underground Space    |    Hydrogeological Modeling and Simulation System |
| | Dynamic Visualization System of Geoscience Model Simulation |
| | Multi-Dimensional Grid Adaptive Generation System for Geoscience Simulation |

## AWARDS AND HONORS

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| 2023 | Presentation at the International Conference, City+2023@Perth, at Session 5 with the theme of Spatial methods. |
| 2023 | One of the organizers of an International Academic Conference, City+2023@Perth, Australia, with the theme of Geospatial Big Data and Artificial Intelligence for Cities |
| 2022 | Won the Bronze Award in the 11th Challenger Cup Shaanxi University Student Entrepreneurship Plan Competition |
| 2022 | Participated in the 10th Challenge Cup College Student Entrepreneurship Plan Competition of Northwest A&F University and won the silver award in the final |
| 2021 | First-class scholarship of Northwest A&F University        2019        Outstanding graduate of Nanjing Normal University |
| 2018 | Excellent postgraduate of Nanjing Normal University (Four times) |
| 2016 | Outstanding Undergraduate Thesis of Northwest A&F University |
| | First-class scholarship of Nanjing Normal University (Two times) |
| 2015 | The National Science and Technology Innovation Project Numerical Simulation and Mechanism Research of Loess Slope Cultivated Land Microtopography won the Excellence Award |
| 2014 | Organize the activity of Three Visits to the Countryside in Ansai Experimental Station, and won the Excellent Award |