YI YU

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🎓 EDUCATION

The Australian National University, Canberra, Australia   07/2021 – Present
Doctor of Philosophy
- Project title: From point-to-pixel: understanding spatiotemporal scaling to improve soil moisture modelling capability through the utilisation of satellite observations

The Australian National University, Canberra, Australia   07/2018 – 08/2020
Master of Environment (Advanced)
- GPA: 6.56/7.00 (First Class Honours Equivalent)

Southwest University, Chongqing, China   09/2014 – 06/2018
Bachelor of Land Resource Management

💼 EXPERIENCES

CSIRO Agriculture and Food, Canberra, Australia   08/2021 – Present
PhD Postgraduate Student   Supervisor: Dr. Brendan Malone

Academic collaboration with The Australian National University. The key responsibilities include:
- Committing two days per week as an CSIRO team member to industry-aligned projects that address inter-disciplinary issues over agricultural innovation and soil science fields that cannot be solved using business as usual approaches.
- Establishing the geo-database, including in-situ measurement, drone, satellite, and proximal observations, as well as soil and landscape grids of Australia, to enable spatiotemporal modelling of soil water dynamics for key growing regions in Australia.
- Conducting research tasks as required and conferring with clerical and supervisory personnel to gather suggestions for improvements.

ANU Institute for Water Futures, Canberra, Australia   01/2021 – 01/2022
Research Officer   Supervisor: Dr. Luigi Renzullo

- Processing continent-scale satellite retrievals and land surface observations acquired from Geoscience Australia, NASA and CSIRO. Demonstrating expert-level spatial analysis skills using R and Python. Proficient with essential Linux commands and utilising programming modules from the Gadi supercomputer to complete research tasks.
- Undertaking testing and statistical analysis as required and preparing and disseminating relevant analysis reports to internal and external stakeholders, including external funding agencies.
- Participating in workshops and professional networks across campus to develop a broad base of industry knowledge, and providing input to improve the area's research practices and processes.

UniLodge Australia, Canberra, Australia   02/2020 – 01/2021
Senior Resident

Key skills acquired: Emotional Intelligence, Collaboration, Leadership, Self Care, Time Management.
- Acting as a residential leader who is front-liner in delivering pastoral care to university students on campus.
- Responding timely to first-aid emergencies, fire drills and evacuations; Responsible for immediate referral to the relevant emergency body.
- Organising lodge events and actively committing to an inclusive community; Providing mental health advice and personal assistance to residents on the assigned floor through regular catch-ups.

◪ Publications

- **Yu, Y.**, Renzullo, L.J. and Tian, S., 2021. Continental scale downscaling of AWRA-L analysed soil moisture using random forest regression, *24th International Congress on Modelling and Simulation, Sydney, Australia.*
- **Yu, Y.**, Xu, T. and Wang, T., 2020. Outmigration Drives Cropland Decline and Woodland Increase in Rural Regions of Southwest China, *Land, 9*(11), p.443.
- **Yu, Y.**, 2020. *An Assessment of Outmigration-related Land Use Transition in Rural Area and Corresponding Social and Ecological Dynamics - A Case Study in Southwest China*, Masters Thesis, The Australian National University, Canberra.
- Wang, T., Yan, J., Cheng, X. and **Yu, Y**., 2020. Irrigation Influencing Farmers' Perceptions of Temperature and Precipitation: A Comparative Study of Two Regions of the Tibetan Plateau, *Sustainability, 12*(19), p.8164.

★ Honours & Awards

- ANU University Research Scholarship (2021 - 2024)
- CSIRO-ANU Digital Agriculture PhD Supplementary Scholarship (2021 - 2025)
- ANU Unilodge Senior Resident Scholarship (2020)

ⓘ Skills & Certificates

- **Programming Languages**: R Programming (Expert); Python (Advanced); Shell Scripting
- **Software Packages**: ArcGIS; EndNote; Google Earth Engine; LaTeX
- **Certificates**: First Aid Certificate; Youth Mental Health First Aider

✸ References

- References available on request.