# **DONGYANG WEI**

P.hD. Candidate Department of Geography and Spatial Sciences University of Delaware dywei@udel.edu

EDUCATION	
Sept. 2019 - Present	University of Delaware (US) <b>PhD, Geography (expected in 2024)</b> Advisor: Kyle F. Davis
Oct. 2017 - Sept. 2018	Imperial College London (UK) <b>MS, Ecosystem and Environmental Change (merit)</b> Advisor: I. Colin Prentice and Sandy P. Harrison
Sept. 2013 - Jun. 2017	Shanghai Jiao Tong University (China) BS, in Landscape Architecture
Apr. 2015 - Aug. 2015	Technical University of Munich (Germany) Exchange Student, in Civil Engineering

Experience	
Jun. 2022 - Present	Research Assistant University of Delaware
Sep. 2019 - May. 2022	Teaching Assistant University of Delaware
Oct. 2018 - Apr. 2019	Research Assistant University of Reading (UK) Mentors: Sandy P. Harrison and I. Colin Prentice

### **PUBLICATIONS**

Wei, D., Gephart, J. A., Iizumi, T., Ramankutty, N., Davis, K. F. (In Review) "Fluctuations in planted and harvested area explain a substantial portion of crop production shocks in the US", Nature Sustainability.

- Wei, D., Herrero, M., Mason-D'Croz, D., Davis, K. F. (In Prep) "Projected dietary trends are unlikely to meet nutritious and sustainable dietary goals", *Science (invited)*.
- Richter, B. D., Caldwell, P., Davis, K. F., **Wei, D.,** Marston, L. T., Lamsal, G., Ao, Y. Z. (In Review) "Alleviating Water Scarcity by Optimizing Crop Mixtures", *Nature Water*.
- Wei, D., Davis, K. F. (2021). Culturally appropriate shifts in staple grain consumption can improve multiple sustainability outcomes. *Environmental Research Letters*, 16(12), 125006. <u>https://doi.org/10.1088/1748-9326/ac32fc</u>.
- Wei, D., González-Sampériz, P., Gil-Romera, G., Harrison, S. P., Prentice, I. C. (2021). Seasonal temperature and moisture changes in interior semi-arid Spain from the last interglacial to the Late Holocene. *Quaternary Research*, 1-13, <u>https://doi.org/10.1017/qua.2020.108</u>.
- Turner, M., Wei, D., Prentice, I.C., Harrison, S. P. (2020). The impact of methodological decisions on climate reconstructions using WA-PLS. *Quaternary Research*, 1-16. <u>https://doi.org/10.1017/qua.2020.44</u>.
- Wei, D., Prentice, I. C., Harrison, S. P. (2020). The climatic space of European pollen taxa. *Ecology*, 101, 8. <u>https://doi.org/10.1002/ecy.3055</u>.
- Wei, D, Harrison, S. P., Prentice I. C. (2019). The climatic space of European pollen taxa. University of Reading. Dataset. <u>http://dx.doi.org/10.17864/1947.204</u>.

### AWARDS AND HONORS

2022	Climate Change Hub Graduate Research Enhancement Grant, University of Delaware (\$6,037)
2022	University Doctoral Fellowship Award, University of Delaware (\$28,667)
2022	Teaching Assistant Award, University of Delaware
2020	Virtual Student Travel Grant, American Geophysical Union (\$1,000)
2017	Outstanding Capstone Project, Shanghai Jiao Tong University (China)
2016	Advanced Agriculture Scholarship, Shanghai Jiao Tong University (China) (¥2,000)
2015	Excellent Exchange Student Scholarship, Deutscher Akademischer Austausch Dienst (Germany) (€1,500)
2015 - 2016	Internship China Urban Construction Design & Research Institute (China)
2014	Academic Excellence Scholarship, Shanghai Jiao Tong University (China) (¥1,000)

### **TEACHING**

#### University of Delaware (2019 - 2022)

Introduction to GIS, GEOG372 (Teaching assistant) Geographic Information Science and Systems, GEOG670 (Teaching assistant) Climate and Climate Change, GEOG341 (Teaching assistant) Air Pollution Meteorology, MAST/GEOG/CIEG 415/615 (Teaching assistant) Cartography, GEOG 472/686 (Teaching assistant) Environmental Statistics, STAT/ENSC 475 (Teaching assistant)

#### MENTORING

Dec. 2021 - Present	Coletti, Carolyn (University of Delaware, BS)
Apr. 2022 - Present	Johnson, Carissa (University of Delaware, BS)

#### **PRESENTATIONS**

- Wei D., Gephart J., Ramankutty N., Davis K. F. (2022) "Majority of Crop Production Shocks Explained by Fluctuations in Planted and Harvested Area in the US", Poster Presentation (highlighted), American Geophys. Union Annual Meeting.
- Wei D., Davis K. F. (2022) "Projected Dietary Trends are Unlikely to Meet Nutritious and Sustainable Dietary Goals in the World", Poster Presentation, American Geophys. Union Annual Meeting.
- Khan B., Wei D., Davis K. F. (2022) "Exploring Links Between Climate Extremes, Cropland Expansion, and Nutrition in Nigeria", Poster Presentation, American Geophys. Union Annual Meeting.
- Wei D. (2022) "How culturally appropriate shifts in staple grain consumption can improve multiple sustainability outcomes", Oral Presentation, Sustainable Dietary Choices, <u>Leadwire</u> (*invited*).
- Wei D. (2022) "Fluctuations in planted and harvested area explain a substantial portion of crop production shocks in the US", Oral Presentation, SMSP Graduate Student Symposium, University of Delaware.
- Wei D. (2022) "Majority of production shocks for major US crops explained by fluctuations in planted and harvested area", Oral Presentation, DENIN symposium, University of Delaware.

- Wei D., Davis K. F. (2021) "Majority of production shocks for major US crops explained by fluctuations in planted and harvested area", Oral Presentation, American Geophys. Union Annual Meeting.
- Wei D., Davis K. F. (2020) "Dietary Transitions Can Overcome the Nutritional Threat of Increasing CO<sub>2</sub>", Oral Presentation (virtual), American Geophys. Union Annual Meeting, virtual.

## ACADEMIC AND PUBLIC SERVICE

2022-Present	Senator of the Geography program in the Graduate Student Government, UD
2022-Present	Graduate Representative in the Department of Geography, UD
2022	Volunteer for New Graduate Student Orientation, UD
2022-Present	EmPOWER Mentor, UD
2022	Panelist for Proposal Writing, UD
2021-Present	Inaugural Member, UD Data Science Institute Graduate Student Fellow
2019	Volunteer, DE Coastal Day
2018	Volunteer, The Frontiers in Ecology Evolution & Conservation Symposium (UK)
2018	Volunteer, Graduation Ceremony, Imperial College London (UK)
2015-2017	Volunteer Docent, Shanghai Science and Technology Museum, Shanghai Natural History Museum, and Shanghai Botanical Garden (China)
2014-2017	Team Leader, College Students Volunteer Service in Penglai (China)

# MEDIA

- 2022 Research featured in Planetary Health Alliance Newsletter. https://mailchi.mp/harvard/planetary-health-newsletter-january2022
- 2022 Research highlighted in: "Culturally Appropriate Food Shifts", Adam Thomas, UDaily. https://www.udel.edu/udaily/2022/january/culturally-appropriate-dietary-food-shifts/

# PROGRAMMING AND COMPUTING SKILLS

R, Python, MATLAB, ArcGIS Pro, QGIS, SPSS, C++, PS, AI, LR, AutoCAD, SketchUp