Fang Fang

Associate Teaching Professor
School of Public Policy and Urban Affairs
School of Criminology and Criminal Justice
Northeastern University

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Professional Experience

- 08/2024-present Associate Teaching Professor, Northeastern University
- 2022-2024 Teaching Assistant Professor, Department of Urban and Regional Planning, University of Illinois at Urbana-Champaign
- 2019- 2022 Lecturer, Department of Urban and Regional Planning, University of Illinois at Urbana-Champaign

Education

- 2014-2019 **Ph.D.** Geography (With Applied Statistics Certificate) West Virginia University
- 2012-2014 **M.S.** Environmental Engineering, Ulsan National Institute of Science and Technology, South Korea,
- 2008-2012 **B.S**. Natural Resource Management and Urban & Regional Planning, Beijing Forestry University, China

Grants and Awards

- 2024 FAA Specialized Faculty Award for Excellence, University of Illinois at Urbana Champaign
- 2023 Assessing Urban Forest Side View Profiles to Measure Climate Change Mitigation Potential, Campus Research Borad, UIUC, Andrew Greenlee, **Fang Fang (co-PI)** ($28,769)
- 2022 Professional Development Funds for Specialized Faculty, FAA, UIUC ($ 500)
- 2018 "*Remote Sensing of Urban Tree Species and Tree Stress*", Brenden McNeil (PI), **Fang Fang (co-PI),** *NSF* Doctoral Dissertation Research Improvement grant award ($18,000)
- 2018 Trevor and Sylvia Harris Award, Department of Geology and Geography, West Virginia University ($500)
- 2017 Student Travel Grant, International Society of Arboriculture and Education Academy ($750)
- 2017 ESRI Annual Conference Assistantship Award
- 2016 Second Place, Student Illustrated Paper Competition in Annual Meeting of the Association of American Geographers ($200)

Peer-reviewed Journal Articles

- **Fang, F.,** Greenlee, A. J., He, Y., & Eutsler, E. (2023). Evaluating the quality of street trees in Washington, DC: Implications for environmental justice. Urban Forestry & Urban Greening, 85, 127947.
- He, Y., Seminara, P. J., Huang, X., Yang, D., Fang, F., & Song, C. (2023). Geospatial Modeling of Health, Socioeconomic, Demographic, and Environmental Factors with COVID-19 Incidence Rate in Arkansas, US. ISPRS International Journal of Geo-Information, 12(2), 45.
- Dye, A. W., Kim, J. B., McEvoy, A., **Fang, F**., & Riley, K. L. (2021). Evaluating rural Pacific Northwest towns for wildfire evacuation vulnerability. *Natural Hazards*, 1-25.
- **Fang, F.,** McNeil, B. E., Warner, T. A., Maxwell, A. E., Dahle, G. A., Eutsler, E., & Li, J. (2020). Discriminating tree species at different taxonomic levels using multi-temporal WorldView-3 imagery in Washington DC, USA. *Remote Sensing of Environment*, 246, 111811.
- **Fang, F.,** McNeil, B., Warner, T., Dahle, G., & Eutsler, E. (2020). Street tree health from space? An evaluation using WorldView-3 data and the Washington DC Street Tree Spatial Database. *Urban Forestry & Urban Greening*, 126634.
- **Fang, F**., McNeil, B. E., Warner, T. A., & Maxwell, A. E. (2018). Combining high spatial resolution multi-temporal satellite data with leaf-on LiDAR to enhance tree species discrimination at the crown level. *International Journal of Remote Sensing*, 1-19, DOI: 10.1080/01431161.2018.1504343
- Maxwell, A. E., Warner, T. A., & **Fang, F**. (2018). Implementation of machine-learning classification in remote sensing: an applied review. *International Journal of Remote Sensing*, 39(9), 2784-2817. DOI: 10.1080/01431161.2018.1433343
- **Fang, F**., Im, J., Lee, J., & Kim, K. (2016). An improved tree crown delineation method based on live crown ratio from airborne LiDAR data. *GIScience & Remote Sensing, 53(3), 402-419.* DOI:10.1080/15481603.2016.1158774
- Im, J., Quackenbush, L. J., Li, M., & **Fang, F**. (2014). Optimum Scale in Object-Based Image Analysis. *Scale Issues in Remote Sensing*, 197-214. John Wiley & Sons.

Awards and Distinctions

- 2023 List of Teachers Rated as Excellent (UP 418, UP317, UP517, FAA330), University of Illinois at Urbana-Champaign
- 2022 List of Teachers Rated as Excellent (FAA330, UP519), University of Illinois at Urbana-Champaign
- 2021 List of Teachers Rated as Excellent (UP 418, UP 517, FAA330), University of Illinois at Urbana-Champaign
- 2020 List of Teachers Rated as Excellent (UP 418 (twice), UP116, UP517), University of Illinois at Urbana-Champaign

- 2019 Eberly College Outstanding Graduate Teaching Assistant, West Virginia University

Courses Taught

- UP 116: Urban Informatics I (Spring 2020, Spring 2021, Spring 2022, Spring 2023, Spring 2024)
- UP 317: Introduction to Data Science for Planners (Spring 2020, Fall 2020, Fall 2021, Fall 2022, Fall 2023)
- UP 418: GIS for Planners (Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Fall 2022, Fall 2023)
- UP 517: Adv. Data Science for Planners (Fall 2020, Fall 2021, Fall 2022, Fall 2023)
- FAA 330: Making Sustainable Design (Spring 2021, Spring 2022, Spring 2023, Spring 2024)
- UP 519: Advanced GIS for Planners (Spring 2022, Spring 2023)

Webinars, presentations and invited talks

- 2024 "An quantitative evaluation of urban street trees for environmental justice", AAG annual conference, **Fang, F.,** Greenlee, A. J., He, Y., & Eutsler, E., Sheikhfarshi, S., Zhang, Z
- 2022 "Just green is not enough", an evaluation of urban street trees in Washington D.C., Trees In The City Virtual Symposium
- 2022 "Trees in the city: species detection and health evaluation using GIS", Department of Geography, University of Central Arkansas
- 2021 "Evaluating rural Pacific Northwest towns for wildfire evacuation vulnerability", Evacuation Planning webinar series from Fire Adapted Communities
- 2021 "GIS and quantitative measurements of urban forest," Landscape Architecture at Illinois
- 2019 "Remote sensing of tree species and urban tree health in Washington D.C.", ESRI User Conference
- 2018 "Urban tree stress symptom detection using satellite images in Washington D.C", Annual meeting of International Society of Arboriculture
- 2018 "Remote sensing of urban tree stress in Washington D.C", Annual Meeting of the Association of American Geographers
- 2017 "Remote sensing of urban tree stress and tree species in Washington D.C", Annual meeting of International Society of Arboriculture
- 2017 "Are restaurant reviews better in tourist cities? A comparison of Yelp reviews between Las Vegas and Pittsburgh" ESRI User Conference
- 2016 "Tree species discrimination at crown-scale by fusing leaf-on LiDAR and high-resolution multi-spectral satellite data", Annual Meeting of the Association of American Geographers

Academic Professional Service

- Early Career Editorial Board member, GeoHealth at AGU, 2024

- Guest editor for Special issue “Advances in the Application of Lidar” in *Remote Sensing*, 2024
- Guest editor of Special issue “Advances in Mapping Land Use and Land Cover Based on Remotely Sensed Data” in *Remote Sensing*, 2022
- Manuscript reviewer for: Landscape and Urban Planning, *Remote Sensing of Environment, International Journal of Remote Sensing*, *GIScience & Remote Sensing*, *Urban Forestry & Urban Greening*
- Mentor for undergraduate researcher, NASA West Virginia Space Grant EPSCoR program 2015

Students Advised

PhD

- Shiva Sheikhfarshi (2022- present)

Academic Services

- 2022- 2024, Sustainable Design Faculty Curriculum Advisory Committee
- 2022- 2024, Faculty Advisory Committee at Department of Urban and Regional Planning
- 2021- 2024, BAUSP Curriculum Committee
- 2021- 2024, Data Science Certificate Program Committee
- 2021 Organizing committee of GIS Day, Department of Geography and Geographic Information Science
- 2019-2020 PhD Program and Admissions Committee

Workshops

- 2021 Introduction to R for Urban Planners

Affiliations and Memberships

2019-Present American Planning Association (APA)

2014 – 2019 Association of American Geographers (AAG)

2018-2019 International Society of Arboriculture and Education Academy (ISA)