

Emine Fidan, Ph.D.

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EDUCATION

2022 Ph.D., Biological and Agricultural Engineering, North Carolina State University
2018 B.S., Biosystems Engineering, The University of Tennessee

PROFESSIONAL APPOINTMENTS

Jan 2023 – Present Assistant Professor at University of Tennessee
Aug 2018 – Dec 2022 Graduate Research and Teaching Assistant at NC State University
Mar 2022 – Mar 2023 NC WWRI and NC Sea Grant Graduate Student Fellow
Jun 2019 – Aug 2019 NC Space Grant Graduate Research Fellow
Oct 2019 – Dec 2020 NSF INFEWS-ER Food-Energy-Water (FEW) Graduate Scholar
July 2018 – Aug 2018 Research Technician at Tennessee Tech University Water Center
May 2017 – July 2017 Research Intern at Oak Ridge National Laboratory

RESEARCH FOCUS

agriculture and water resource management; water quality; flooding; ecosystem health; geospatial analytics; machine learning modeling; large-scale watershed analysis; environmental data science

PUBLICATIONS

Fidan, E. N., N. G. Nelson, J. Gray, B. Doll (2023) Modeling Floods with Forests: Predicting Daily Flood Dynamics Using Random Forest Modeling. *Environmental Modelling & Software*, 167. 105758. <https://doi.org/10.1016/j.envsoft.2023.105758>
Stablein, M.J., J. Gonzalez-Cruz, **E. N. Fidan**, et al. (2022) Compound[ing] Disasters in Puerto Rico: Pathways for Virtual Transdisciplinary Collaboration to Enhance Community Resilience. *Global Environmental Change*, 76. 102558. <https://doi.org/10.1016/j.gloenvcha.2022.102558>
Harris, A., **E. N. Fidan**, N. G. Nelson, R. Emanuel, et al. (2021) Microbial Contamination in Environmental Waters of Rural and Agriculturally-Dominated Landscapes Following Hurricane Florence. *Environmental Science & Technology Water*, 1(9). <https://doi.org/10.1021/acsestwater.1c00103>
Fidan, E. N. (2017). Streambank Erosion Mapping on the Nottoway River Using GPS-based Above-water Video. *Pursuit*, 8(1). <https://trace.tennessee.edu/pursuit/vol8/iss1/6>

RESEARCH REPORTS

Fidan, E.N. (2023) Advancing Understanding of Flood Water Quality Distributions and Drivers through Statistical Modeling. NC WWRI and NC Sea Grant Graduate Research Fellowship Report.
Fidan, E. N. (2019) Using Machine Learning and Remotely Sensed Data to Develop Spatiotemporal Maps of Flood Surge and Retreat. NC Space Grant Graduate Research Fellowship Report.
Fidan, E. N., P. D. Ayers, and M. B. Iannuzzi. (2018) Habitat Mapping for Aquatic Species at Risk on Military Installations Using GPS-based Underwater Video. Tech. no. 15-776. Department of Defense: Legacy Program.

SCHOLARSHIP AND ACHIEVEMENTS

2023 UT Research Development Academy Fellow
2021 ASABE Annual International Meeting Oral Competition winner
2020 NSF Travel Award for HurriCon Conference
2019 Biological and Agricultural Engineering Departmental Three Minute Thesis Competition winner
2019 ASABE Annual International Meeting Oral Competition winner
2019 SESYNC Travel Award for Geospatial Data Analysis Short Course
2019 NSF Graduate Research Fellowship Program Honorable Mention
2019 AEES Annual Meeting Graduate Student Design Competition winner
2018 North Carolina State University Provost's Fellow
2018 K. H. Duncan Award for Outstanding Undergraduate Research at the University of Tennessee
2018 Outstanding Senior in the College of Agricultural Sciences and Natural Resources
2018 Undergraduate Student with Professional Promise in Biosystems Engineering
2017 College of Agricultural Sciences and Natural Resources Award Committee student member
2016 Outstanding Junior in the College of Agricultural Sciences and Natural Resources
2015 Outstanding Freshman in the Biosystems Engineering Major Award