

Curriculum Vitae

Geoffrey Fouad

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Areas of Specialization

I am a **geographer** who uses **geographic information systems (GIS)**, **remote sensing**, and **modeling** to study **environmental** and **social** systems in space and time.

Education

San Diego State University/UC Santa Barbara	Ph.D. in Geography	May 2016
University of South Florida	M.S. in Environmental Science	May 2009
University of South Florida	Graduate Certificate in GIS	May 2009
Catawba College	B.S. in Environmental Science	May 2006

Funding

Wetland inundation potential based on terrain and runoff data Agency: Tampa Bay Water (\$176,875) PI: Geoffrey Fouad, Terrie Lee, and Kai Rains	2019-2021
Community asset mapping for New Jersey youth criminal justice taskforce Agency: New Jersey Institute for Social Justice (\$6,275) PI: Geoffrey Fouad	2019
Groundwater level trends of wetlands subject to groundwater pumping Agency: Tampa Bay Water (\$83,500) PI: Geoffrey Fouad and Terrie Lee	2017-2018
Potentiometric surface modeling of the Upper Floridan aquifer Agency: Tampa Bay Water (\$46,000) PI: Geoffrey Fouad and Terrie Lee	2016

Research and Teaching Appointments

Assistant Professor of Geography, GIS Program Director, and University Cartographer Monmouth University, West Long Branch, New Jersey	August 2016-present
Adjunct Professor, Physical Geography, Mesa College, San Diego, California	Fall 2015
Adjunct Professor, GIS, Palomar College, San Marcos, California	Fall 2015
Graduate Assistant, Joint Doctoral Program in Geography, San Diego State University and UC Santa Barbara	August 2010-August 2015
Researcher, Florida Water Science Center, US Geological Survey, Tampa, Florida	October 2008-August 2013

Recent Courses Taught

Upper Level

Graduate Level Introduction to GIS (AN/GO 524), GIS Program, Monmouth University	4 terms
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August 2020

Spatial Data (GIS 324), GIS Program, Monmouth University	3 terms
Spatial Analysis (GIS 325), GIS Program, Monmouth University	3 terms
GIS Applications and Programming (GEOG 134), GIS Program, Palomar College	Fall 2015
<i>Lower Level</i>	
Introduction to GIS (GIS 224), GIS Program, Monmouth University	11 terms
Environmental Geography (GO 102), Geography Program, Monmouth University	7 terms
Introduction to Physical Geography (GO/SC 103), Geography Program, Monmouth University	4 terms
People, Places, and Environments (GO 100), Geography Program, Monmouth University	Fall 2016

Publications

*Denotes student-led publication

In Preparation

Fouad, G., J.L. Whytlaw, S. Hackman, and J.G. Comiskey. In preparation. GIS for homeland security and emergency management: An all-hazards approach. John Wiley & Sons, Hoboken, New Jersey. [Link](#)

Fouad, G. and T.M. Lee. In preparation. A spatially distributed groundwater metric for describing hydrologic changes in a regional population of wetlands north of Tampa Bay, Florida, from 1990 to 2015. *Wetlands*. [Link](#)

In Review

*Badlowski, G.A., J.E. Adolf, and **G. Fouad**. Spatial analysis of water quality parameters in Hilo Bay, Hawai'i using a combination of interpolated surfaces and hot spot analysis. *Environmental Monitoring and Assessment*. [Link](#)

Published

Fouad, G. and H.A. Loáiciga. 2020. Independent variable selection for regression modeling of the flow duration curve for ungauged basins in the United States. *Journal of Hydrology*, 587. [Link](#)

Lee, T.M. and **G. Fouad**. 2018. *Changes in wetland groundwater conditions in the northern Tampa Bay area from 1990 to 2015*. Tampa Bay Water Data Product and Technical Report. [Link](#)

Fouad, G., A. Skupin, and C.L. Tague. 2018. Regional regression models of percentile flows for the contiguous United States: Expert versus data-driven independent variable selection. *Journal of Hydrology: Regional Studies*, 17, 64-82. [Link](#)

Lee, T.M. and **G. Fouad**. 2017. *Extending the monthly time series of the potentiometric surface in the Upper Floridan aquifer, Northern Tampa Bay area, Florida, January 1990-December 2015*. Tampa Bay Water Data Product and Technical Report. [Link](#)

Fouad, G. *Flow duration curve prediction for ungauged basins: A data-driven study of the contiguous United States*. Doctoral Dissertation, San Diego State University and UC Santa Barbara, 2016. [Link](#)

Hope, A., **G. Fouad**, and Y. Granovskaya. 2014. Evaluating drought response of Southern Cape Indigenous Forests, South Africa, using MODIS data. *International Journal of Remote Sensing*, 35, 4852-4864. [Link](#)

Lee, T.M. and **G. Fouad**. 2014. *Creating a monthly time series of the potentiometric surface in the Upper Floridan aquifer, Northern Tampa Bay area, Florida, January 2000-December 2009*. US Geological Survey Scientific Investigations Report 2014-5038. [Link](#)

Alsharif, K.A. and **G. Fouad**. 2012. Lake performance differences in response to land use and water quality: Data envelopment analysis. *Lake and Reservoir Management*, 28, 130-141. [Link](#)

Fouad, G. *Assessing the performance of water bodies in Hillsborough County, Florida using data envelopment analysis (DEA)*. Master's Thesis, University of South Florida, 2009. [Link](#)

Recent Presentations

*Denotes student-led presentation

*Badlowski, G.A., J.E. Adolf, and **G. Fouad**. *Spatial analysis of water quality parameters in Hilo Bay, Hawai'i*. American Association of Geographers Annual Meeting, Washington, DC, April 3-7, 2019. [Link](#)

Lee, T.M. and **G. Fouad**. *Trend analysis of recharging and discharging groundwater conditions below wetlands in northern Tampa Bay, Florida*. Society of Wetland Scientists Annual Meeting, Denver, Colorado, May 29-June 1, 2018. [Link](#)

Hayes, E., **G. Fouad**, and T.M. Lee. *LiDAR accuracy assessment in 305 wetlands*. American Water Resources Association GIS and Water Resources X Conference, Orlando, Florida, April 22-25, 2018. [Link](#)

Fouad, G. *Comparison of survey methods to develop a summer field course to map the bottom of Lake Como, New Jersey*. American Association of Geographers Annual Meeting, New Orleans, Louisiana, April 10-14, 2018. [Link](#)

Fouad, G. *Variable selection for regression models of percentile flows*. American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 11-15, 2017. [Link](#)

Fouad, G. *A study of different survey methods for the development of an experiential education course to map the bottom of coastal lakes in Monmouth County, New Jersey*. Monmouth University, Research and Pedagogy Seminar Series, West Long Branch, New Jersey, October 25, 2017.

*Candiloro, T., **G. Fouad**, and J. Nickels. *Bathymetry and flood mapping of Lake Como, New Jersey*. Monmouth University, Summer Research Program Symposium, West Long Branch, New Jersey, August 10, 2017. [Link](#)

Fouad, G. and A. Skupin. *A self-organizing map exploratory analysis of the flow duration curve in the United States*. Japan Geoscience Union-American Geophysical Union Joint Meeting, Chiba, Japan, May 20-25, 2017. [Link](#)

Fouad, G. *Geographic regions vs clustering to predict the flow duration curve for ungauged basins in the contiguous US*. Association of American Geographers Annual Meeting, Boston, Massachusetts, April 5-9, 2017. [Link](#)

Fouad, G., A. Skupin, and A.S. Hope. *Independent variable complexity for regional regression of the flow duration curve in ungauged basins*. European Geosciences Union General Assembly, Vienna, Austria, April 17-22, 2016. [Link](#)