Carnegie Mellon University, Pittsburgh, PA
M.S. in Civil Engineering

PROFESSIONAL APPOINTMENT

Associate Professor — **Aug. 2018 – present**; **Aug. 2012 – Aug. 2018**

Postdoctoral Fellow — **Sep. 2011 – May 2012**
Department of Civil and Environmental Engineering, Northwestern University

Visiting Scholar — **Oct. 2011 – Apr. 2012**
Oak Ridge National Laboratory
Worked on Project "*Data Analysis for Plug-In Electric Vehicle Studies*" funded by the ORNL, as a key researcher.

HONORS & AWARDS

11. Research "SWEET SIXTEEN" 2017*, American Association of State Highway and Transportation Officials (AASHTO) — 2017

    * For 2016 TxDOT-funded project "*Proactive Traffic Signal Timing and Coordination for Congestion Mitigation on Arterial Roads*", worked as PI.

10. ASCE ExCEED Fellowship, American Society of Civil Engineers (ASCE) — 2017
9. University Merit Award, Lamar University — 2017
8. Larry Lawson Faculty Fellowship, Lamar University — 2017-2019
7. Presidential Faculty Fellowships for Undergraduate Research, Lamar University — 2014-2015

3. Assessing Energy Use and Charging Facility Investment for Plug-in Hybrid Electric Vehicles based on Longitudinal Travel Data. **PI**, $5,000, funded by *the Research Enhancement Grants (REG) of Lamar University*, September 2013 – August 2014.

2. Quantitative Risk Analysis of Vessel Accidents in Southeast Texas Waterways. **PI**, $5,000, funded *by the Texas A&M Transportation Institute*, March 2013 – August 2013.

1. Projecting Plug-in Vehicle Demand and Impact with Detailed Market Segmentation. **Postdoctoral Researcher**, funded by *Vehicles Technologies Program of the U.S. Department of Energy*, 2011-2012.

REFERRED PUBLICATIONS

In Journals ONLY (* = corresponding author)

40. Li, Y., Li, Y., **Wu, X.**, and Craig, B. "Investigation of contributing factors to traffic crashes severity in Southeast Texas using multiple correspondence analysis", *The Australasian College of Road Safety Journal and Conference*, under the 2nd-round review.

39. Haselbach, L., Adesina M., Muppavarapu, N., and **Wu, X.** (2022) "Spatially estimating flooding depths from damage reports", *Frontiers in Water, section Water and Built Environmen*, under review.

38. Qian, Q, Su, L. Zaloom, V., Jao, M., **ɜ M**

28. Roy, U. and **Wu, X.***(2019) “AIS-data based vessel traffic’s characteristics and travel behavior analysis: a case study

9. **Wu, X.** and Nie, Y. (2009) “Implementation issues in approximate algorithms for reliable a priori shortest path problem”, *Transportation Research Record*, No. 2091, pp. 51-60.
8. **Wu, X.**, Akinci, B. and Davidson, C. (2007). “Modeling graywater in residences: use of shower effluent in the toilet reservoir”, *Journal of Green Buildings*, Vol. 2, pp. 111-120, 2007
7. Zhang, Z., **Wu, X.** and Yang, X. (2006) “BAPAS – a life cycle building environmental performance assessment model”,

Annual Meeting, Washington DC, January 8-12, 2017.

5. Hu, Y., Chen, Z. and **Wu, X.** (2017) “Station allocation model for electric bicycle-sharing

11. Finding reliable shortest paths in dynamic stochastic networks. *The 92nd Annual Meeting of Transportation Research Board (TRB)*, Washington DC, Januray 2013.
10. Solving multi-class percentile user equilibrium traffic assignment problem: a computational study.

3. Nie, Y., **Wu, X.**, Li, Q., Dillenburg, J. and Nelson, P. (2011) Developing Travel Reliability Inventory for the Chicago Region. Prepared for the Illinois Department of Transportation.

2. Nie, Y., **Wu, X.**, Zissman, J., Lee, C., Haynes, M., Nelson, P. and Dillenburg, J. (2010) Providing Reliable Route Guidance: Phase II, Technical Report #2010-001. Prepared for the Center for the Commercialization of the Innovative Transportation Technology, Northwestern University.

1. Nie, Y., **Wu, X.**, Nelson, P. and Dillenburg, J. (2009) Providing Reliable Route Guidance using Chicago Data, Technical Report #2009-001. Prepared for the Center for the Commercialization of the Innovative Transportation Technology, Northwestern University.

HIGHER EDUCATION EXPERIENCE

Undergraduate Course:

1. CVEN 2272 Introduction to CAD and Surveying, Spring 2020 - present
2. CVEN 2270 Mechanics of Solid, core course, Spring 2018 – present
3. CVEN 3290 *Engineering Probability and Statistics*, core course, Fall 2012 – 2016, 2018
4. CVEN 4365 *Introduction to Transportation Engineering*, core course, Fall 2012 - present

Graduate Course:

Current:

1. CVEN 5320 *Engineering Project Management*
2. CVEN 5364 *Transportation Engineering and Traffic Analysis*, graduate elective
3. CVEN 5370 *GIS Applications in Engineering*
4. CVEN 5366 *Travel Demand Analysis*

Previous:

5. CVEN 5347 *Statistical Principal Engineering Systems* (2012 - 2016)
6. CVEN 5375 *Risk Analysis and Decision Making in Engineering* (2013 - 2017)
7. CVEN 5365 *Urban Transportation System Analysis* (2013)

STUDENT ADVISING

Doctoral Students (serve as Dissertation Adviser):

3. Mubarak Adesina, 2020 – present.
2. Shahin Sajjadi, 2019 – present.
1. Uttara Roy, 2017 – 2020,

    Dissertation: *Study of the Travel Time of Vessels and Their Delays Based on AIS Data: a case study in Houston Ship Channel*

Master studen

8. Bipil Mainali, graduated in May 2018.

    Thesis: *Implementation of Proactive Signal Control in Arterial Corridor with Multi-Intersections Equipped with Loop Detectors*

7. Benjamin Kolkmeie, graduated in May 2017.

    Thesis: *Study of Wake Wash in Sabine-Neches Waterways*

6. Afifa Rahman, graduated in May 2017.

    Thesis: