

ABET FACULTY VITAE (2 Page)

Name: Wei (David) Fan

Education:

- Ph.D., Civil Engineering, The University of Texas at Austin, 2004
- M.S., Transportation Engineering, Tongji University, 1999
- B.S., Civil and Mechanical Engineering, Tongji University, 1995

Academic Experience:

- UNC Charlotte, Associate Professor, August 2013 – Present, Full-Time
- University of Texas at Tyler, Associate Professor, August 2011 – August 2013, Full-Time
- University of Texas at Tyler, Assistant Professor, August 2006 – July 2011, Full-Time
- University of Texas at Austin, Graduate Research Assistant, August 1999- May 2004, Part-Time

Non-Academic Experience:

- SAS Institute Inc., Senior Analytical Optimization Solution Software Developer, R&D Division, June 2004 – August 2006

Certifications or Professional Registrations:

- Registered Professional Civil Engineer, State of Texas, Registration No. 103500

Current Membership in Professional Organizations:

- Member, Transportation Research Board (TRB), National Academy of Sciences and National Academy of Engineering

Honors and Awards:

- University Research Award, University of Texas at Tyler, April 2012
- Franz Edelman Award Nominee for Achievement in Operations Research and the Management Sciences, Institute for Operations Research and the Management Sciences (INFORMS), November 2011
- ASCE ExCEEed Teaching Fellow, 2007
- Best Civil Engineering Professor of the Year, University of Texas at Tyler, 2006-2007
- Listed in Marquis Who's Who in America, October 2007, 2010
- SAS Certified Based and Advanced Programmer, November 2004
- Robert Herman Award Nominee for the Southwest University Transportation Center (SWUTC) in U.S. Department of Transportation (USDOT), January 2004

Service Activities (Within and Outside of the Institution):

- Member, UNC Charlotte CEE Undergraduate Academic Appeals Committee, 09/2014-Present
- Member, UNC Charlotte CEE Scholarships and Awards Committee, 09/2014 – Present
- Associate Editor, IEEE Transactions on Intelligent Transportation Systems, 2007 – Present
- Editorial Board, International Journal of Transportation Science and Technology, Feb 2015 – Present
- Editorial Board, International Journal of Transportation, 2012 – Present
- Member, ASCE National Public Transport Committee, 08/25/2011 – Present
- Member, ASCE National Rail Transportation Committee, 07/2011 – Present
- Member, TRB Committee on Highway/Rail Grade Crossings (AHB60), 4/15/2015 – Present

- Member, TRB Committee on Maintenance Equipment (AHD60), 4/15/2012 – Present

Select Publications and Presentations (Last Five Years):

1. Fan, W., Optimal Congestion Pricing Toll Design for Revenue Maximization: Comprehensive Numerical Results and Implications, *Canadian Journal of Civil Engineering*, 42, pp. 544–551, 2015.
2. Fan, W. and Gurmu, Z., Dynamic Travel Time Prediction Models for Buses Using Only GPS Data, *International Journal of Transportation Science and Technology*, Vol. 4, No. 4, pp. 353-370, 2015.
3. Fan, W., Kane, M. and Haile, E., Predicting the Severity of Pedestrian Crashes on Highway-Rail Grade Crossing, *Journal of Advances in Transportation Studies*, Volume 36, pp. 63-74, 2015.
4. Fan, W., Optimal Pricing and Highway Network Improvement Problem under a
5. Build-Operate-Transfer Scheme, *Journal of Advances in Transportation Studies*, Volume 35, pp. 43-54, 2015.
6. Fan, W., Choe, S.Y. and Leite F., Prevention of Backover Fatalities in Highway Work Zones: A Synthesis of Current Practices and Recommendations, *International Journal of Transportation Science and Technology*, Vol. 3, No. 4, pp. 311-338, 2014.
7. Fan, W., Optimizing Strategic Allocation of Vehicles for One-way Car-sharing Systems under Demand Uncertainty, *Journal of Transportation Research Forum*, Vol. 53, No. 3, pp. 7-20, 2014.
8. Fan, W. and Wang, F., Managing Pavement Maintenance and Rehabilitation Projects under Budget Uncertainties: A Stochastic Optimization Approach, *Journal of Transportation Systems Engineering and Information Technology*, Elsevier, Vol. 14, No. 6, pp. 92-100, 2014.
9. Fan, W. and Gurmu, Z., Combined Decision Making of Congestion Pricing and Capacity Expansion: Genetic Algorithm Approach, *ASCE Journal of Transportation Engineering*, Volume 140, No. 8, 04014031, 2014.
10. Gurmu, Z. and Fan, W., Artificial Neural Network Travel Time Prediction Model for Buses Using Only GPS Data, *Journal of Publication Transportation*, Volume 17, No. 2, 2014.
11. Fan, W., Machemehl, R., Gemar, M. and Brown, L., A Stochastic Dynamic Programming Approach for the Equipment Replacement Optimization with Probabilistic Vehicle Utilization, *Journal of Transportation Systems Engineering and Information Technology*, Volume 14, Issue 3, pp. 76-84, Elsevier, 2014.
12. Fan, W. and Gurmu, Z., Optimal Bus Scheduling with Dynamic Stochastic Demand: Simulation Framework and Result Analyses, *Journal of Advances in Transportation Studies*, Volume 32, pp. 65-74, 2014.
13. Fan, W., Gemar, M. and Machemehl, R., Equipment Replacement Decision Making: Challenges and Opportunities, *Journal of Transportation Research Forum*, Volume 52, No. 3, pp. 79-90, 2013.
14. Fan, W., Managing Dynamic Vehicle Allocation for Car Sharing Systems: A Stochastic Programming Approach, *Transportation Research Record – Journal of Transportation Research Board*, Issue 2359, pp. 51-58, 2013.
15. Fan, W., Machemehl, R. and Gemar, M. Optimization of Equipment Replacement Dynamic Programming-Based Optimization, *Transportation Research Record – Journal of Transportation Research Board*, Volume 2292, pp. 160-170, 2012.

Recent Professional Development Activities:

- Participant, 2015 Right of Way Fatality and Trespass Prevention Workshop, Federal Railroad Administration, U.S.DOT, Charlotte, NC, August 4 - 6, 2015.
- Participant, UNC Charlotte ADVANCE Faculty Training Workshop, Charlotte, NC, August 26 - November 11, 2014.