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BIOGRAPHICAL SKETCH

Dr. Scott Parr, Ph.D. is an assistant professor at California State University, Fullerton in the Department of Civil and Environmental Engineering. He earned his Ph.D. in Civil Engineering from Louisiana State University specializing in Transportation Engineering and Emergency Management. Dr. Parr is published in several peer reviewed journals and has participated as an expert panelist at conferences and workshops around the nation. Dr. Parr also serves as a subject area expert for several journals such as the *Transportation Research Record*, *Journal of Emergency Management* and *American Society of Civil Engineer's Natural Hazards Review*. Dr. Parr has led research collaborations with the United States Department of Transportation, Department of Homeland Security, Transit Security Administration and Sandia National Laboratory's Radiological Consequence Management and Response Technologies Department. Prior to his appointment at California State University, Fullerton, Dr. Parr was the Associate Director of Research at the Gulf Coast Center for Evacuation and Transportation Resiliency, a University States Department of Transportation sponsored University Transportation Center.

PROFESSIONAL CERTIFICATIONS

Louisiana Professional Engineering and Land Surveying Board, Engineering Intern (E.I.T.)
Certification Number: 31925

EDUCATION

- Louisiana State University, Baton Rouge, Louisiana
Doctor of Philosophy, Dec. 2014. Major in Civil Engineering;
Graduate Minor in Disaster Science Management
- Florida Atlantic University, Boca Raton, Florida,
Master of Science, May 2010. Major in Civil Engineering
- Florida Atlantic University, Boca Raton, Florida,
Bachelor of Science, May 2009. Major in Civil Engineering

PROFESSIONAL WORK EXPERIENCE AND APPOINTMENTS

- **California State University, Fullerton, Department of Civil and Environmental Engineering**, Fullerton, CA; Assistant Professor (tenure track), August 2015 to Present.
- **United States Department of Transportation's University Transportation Center for Evacuation and Resilient Transportation**, Baton Rouge, LA; Associate Director of Research, February 2014 to August 015.
- **Louisiana State University, Department of Civil and Environmental Engineering**, Baton Rouge, LA; Research Assistant, August 2010 to January 2014.
- **Radiological Consequence Management and Response Technologies Department - Sandia**

- National Laboratories**, Albuquerque, NM; Visiting Research Intern, May 2012 to August 2012.
- **Florida Atlantic University, Department of Civil, Environmental & Geomatics Engineering**, Boca Raton, FL; Research Assistant, June 2007 to May 2010. Teaching Assistant, May 2009 to May 2010
 - **Cologne University of Applied Sciences, Faculty of Civil Engineering and Environmental Technologies**, Cologne, Germany; Research Assistant, September 2008 to March 2009.
 - **Bergmann Associates**, Pompano, FL, Civil Engineering Student Intern, January 2007 to August 2007

SCHOLARLY ACTIVITIES

FUNDED PROPOSALS

1. Parr, S. (PI), “Street Scanner Project,” Raytheon Company. 12 months, Total award \$25,000. Awarded December 2016.
2. Panangadan, A. (PI) and S. Parr (co-PI), “Analyzing Commination Patterns on Online Social Media Networks for Traffic Surge Prediction Modeling during Emergency Evacuations,” Research, Scholarship, and Creative Activity (RCSA) Incentive Grant, 12 months, Total award \$10,000, Award num. 5803. Submitted November 2015.
3. Wolshon, B. (PI) and S. Parr (co-PI & PM), “Enhancing Guidance for Evacuation Time Estimate Studies,” Nuclear Regulatory Commission (NRC), 36 months, total amount \$940,000
4. Wolshon, B. (PI) and S. Parr (co-PI), “Quantifying and Evaluating Community Resiliency for Sustainable Cities,” Maritime Transportation Research & Education Center (MarTREC) USDOT Tier 1 University Transportation Center, 48 months, total amount \$225,000
5. Wolshon, B. (PI) and S. Parr (co-PI), “A Smart Port Resiliency Assessment and Planning Tool,” Department of Homeland Security Center of Excellence for Marine Research, 24 months, total amount \$25,000.
6. Parr, S. (PI) and B. Wolshon (co-PI), “Evaluating Coastal and River Valley Communities Evacuation Network Performance Using Macroscopic Productivity,” Maritime Transportation Research & Education Center (MarTREC) USDOT Tier 1 University Transportation Center, 12 months, total amount \$239,401

PROPOSALS UNDER REVIEW

1. Lohman, L. and S. Parr, “CSU Faculty Development in Nuclear Science: Retaining a Diverse Faculty and Fostering Post-Tenure Collaborations Across a 23-Campus System,” Nuclear Regulatory Commission (NRC), 36 months, Total award \$449,266. Submitted October 2016.

REFEREED JOURNAL ARTICLES (*in print*)

1. Shojaat, S., Geistefeldt, J., Parr, S., Wilmot, C., and B. Wolshon. “Sustained Flow Index: A stochastic Measure of Freeway Performance.” Accepted for Publication in *Transportation Research Record, Journal of the Transportation Research Board*, (anticipated date) 2016.
2. Zhang, Z., Parr, S. and B. Wolshon. “Application of a Productivity Function to Assess Network Performance during Mass Evacuations.” Accepted for publication in *International Journal of Transportation*, (anticipated date) 2016.
3. Parr, S. and B. Wolshon. “Methodology for Simulating Manual Traffic Control.” *Transportation Research Record, Journal of Transportation Research* 2562 (2016): 9 – 17.
4. Parr, S., Wolshon, B., and P. Murray-Tutie. “Unconventional Intersection Control Strategies for Urban Evacuation.” *Transportation Research Record, Journal of Transportation Research* 2599 (2016): 52 – 62.
5. Farhadi, N., Parr, S., Mitchell, K., and B. Wolshon. “Use of Nationwide Automatic Identification System Data to Quantify Resiliency of Marine Transportation Systems.” *Transportation Research Record, Journal of Transportation Research* 2549 (2016): 9 – 18.

6. Zhang, Z., S. Parr, H. Jiang, and B. Wolshon, "Optimization Model for Regional Evacuation Transportation Systems Using Macroscopic Productivity Function," *Transportation Research, Part B*, Vol 81, No. 2 pp 616-630. 2015
7. Parr, S., V. Dixit, and B. Wolshon, "Selection and Allocation of Manual Traffic Control Points and Personnel during Emergencies," *Journal of Emergency Management*, Vol 13, No. 2 pp 121-133. 2015
8. Parr, S., E. Kaiser, and A. Stevanovic. "Application of Transit Signal Priority for No-Notice Urban Evacuation," *Natural Hazards Review*, Vol 15, No. 2 pp. 167-169. 2014
9. Parr, S., N. Mitrovic, and A. Stevanovic. "Evaluating Landside Transportation Operations for General Aviation Airports: Estimating Vehicle Efficiency and Pedestrian Safety," *World Review of Intermodal Transportation Research*, Vol 4, No. 1 2013.
10. Kaiser, E. and S. Parr. "Traffic Simulation Modeling for an Urban Chemical Disaster: Emergency Evacuation Development and Case Study," *Latin American and Caribbean Journal of Engineering Education (LACJEE)*, Vol 6, No. 1 pp. 10-17. 2012
11. Parr S., and E. Kaiser. "Critical Intersection Signal Optimization During Urban Evacuation Utilizing Dynamic Programming." *Journal of Transportation Safety and Security*. Vol 3, No. 1 pp. 59-76. 2011

REFEREED JOURNAL ARTICLES (Accepted or In Press But Not Yet Appearing In Print)

1. Ericson, J., M. Beck, Parr, S., and B. Wolshon, "Distracted Driving, Inattentive Blindness, and the Analysis of Failed Pedestrian Detection," Accepted for publication in *Transportation Research Part F: Traffic Psychology and Behavior*, (anticipated date) 2016.

REFEREED JOURNAL ARTICLES (Currently Under Review)

1. Herrera, N., Parr, S., and B. Wolshon. "Driver Compliance and Safety Effects of the 'Three-Foot' Bicycle Passing Laws." Submitted for publication in *Transportation Research Part F: Traffic Psychology and Behavior*. (anticipated data) 2017.
2. Parr, S., Pande, A., and A. Alipour. "A Data Mining Approach to Post Earthquake Resiliency Assessment of Highway Bridges." Submitted for publication in the *Journal of Transportation Safety and Security*, (anticipated date) 2017.

REFEREED CONFERENCE PROCEEDINGS

1. Parr, S., Wolshon, B., and J. Ericson. "Human Performance Modeling of Manual Traffic Control." *Proceedings of the Human Factors and Ergonomics Society 59th Annual Meeting*. Los Angeles, CA 2015. 691 – 695.
2. Wolshon, B., Zhang, Z., Parr, S., Mitchell, B., and J. Pardue. "Agent-Based Modeling for Evacuation Traffic Analysis in Megaregion Road Networks." *Procedia Computer Science* 52 (2015) 908 – 913.
3. Parr, S. and B. Wolshon. "Modeling and Analysis of Manual Intersection Traffic Control for Application in Evacuation Time Estimate Studies." *Transactions of the American Nuclear Society* 2014.
4. Parr, S., E. Kaiser, and A. Stevanovic., "Examining the Level of Service Consequence of Transit Signal Priority during Urban Evacuation," *Procedia-Social and Behavioral Sciences*, 16 (2011) 588 – 599.

CONFERENCE PRESENTATIONS

1. "Analysis and Validation of Police Direction and Control." Accepted for presentation at the 96th Annual Meeting of the Transportation Research Board, Washington, DC, January 2017.
2. "Applying the Sustained Flow Index to Estimate Freeway Capacity." Accepted for presentation at the 96th Annual Meeting of the Transportation Research Board, Washington, DC, January 2017.
3. "Methodology for Simulating Manual Traffic Control", 95th Annual Meeting of the Transportation Research Board, Washington, DC, January 2016.
4. "Unconventional Intersection Control Strategies for Urban Evacuation", 95th Annual Meeting of the Transportation Research Board, Washington, DC, January 2016.
5. "Quantifying Resiliency of Marine Transportation Systems using NAIS Data," 95th Annual Meeting of the Transportation Research Board, Washington, DC, January 2016 (Presented by N. Farhadi).

6. "Sustained Flow Index: A stochastic Measure of Freeway Performance," 95th Annual Meeting of the Transportation Research Board, Washington, DC, January 2016 (Presented by S. Shojaat).
7. "Driver Compliance with the 3-Foot Move Over Law," 95th Annual Meeting of the Transportation Research Board, Washington, DC, January 2016 (Presented by N. Herrera).
8. "A New Parametric Model for Freeway Capacity Based on Stochastic Approach: Case of an Iranian Freeway," 95th Annual Meeting of the Transportation Research Board, Washington, DC, January 2016 (Presented by S. Shojaat).
9. "Human Performance Modeling of Manual Traffic Control." *Human Factors and Ergonomics Society 59th Annual Meeting*. Los Angeles, CA 2015.
10. "Application of a Productive Function to Assess Network Performance During Mass Evacuations," 94th Annual Meeting of the Transportation Research Board, Washington, DC, January 2015.
11. "Forecasting Long-Term Crash Patterns on Interrupted Flow Roadways Using Naturalistic Driving Data," 94th Meeting of the Transportation Research Board, Washington, DC, January 2015.
12. "Modeling and Analysis of Manual Intersection Traffic Control for Application in Evacuation Time Estimate Studies," 2014 American Nuclear Society Winter Meeting and Nuclear Technology, Anaheim, CA, November 2014.
13. "Megaregion Evacuation Analysis Using Traffic Simulation," 39th Annual Hazards Research and Applications Workshop, Broomfield, CO, July 2014.
14. "Characteristics of Manual Traffic Control for Emergencies and Major Events," Third National Evacuation Conference, New Orleans, LA, January 2014. (Given by: B. Wolshon)
15. "Megaregion Evacuation Analysis," 2013 Conference of the Visualization of Big Data, Irvine, CA, October 2013.
16. "Factors Influencing Location of Police Traffic Control Points During Emergencies," 91st Annual Meeting of the Transportation Research Board, Washington, DC, January 2012. (Given by: S. Parr)
17. "Transit Signal Priority for Emergency Evacuation", INFORMS Annual Meeting, Austin, Tx 2010
18. "Comparison of Evacuation Strategies on Urban Populations: Traffic Modeling and Simulation", Transportation Research Forum Conference Proceedings, Washington DC, March 2010.
19. "Critical Intersection Signal Optimization during Urban Evacuation Utilizing Dynamic Programming", National Evacuation Conference, New Orleans LA, Feb 2010. (Given by: E. Kaiser)
20. "Evaluation of Emergency Evacuation Strategies for the Urban Chemical Disaster Federation" Department of Homeland Security University Network Summit, Washington D.C., March 2008

TEACHING ACTIVITIES

COURSES TAUGHT

EGCE 206 – Computer Aided Architectural and Civil Engineering Drafting

Semester: Fall 2016; Overall SOQ Rating: NA (out of 4.0); Avg.GPA: NA; Enrollment: 48
Semester: Spr. 2016; Overall SOQ Rating: 3.64 (out of 4.0); Avg.GPA: 3.13; Enrollment: 39
Semester: Fall 2015; Overall SOQ Rating: 3.72 (out of 4.0); Avg.GPA: 3.11; Enrollment: 37

EGCE 214 – Engineering Surveying

Semester: Fall 2016; Overall SOQ Rating: NA (out of 4.0); Avg.GPA: NA; Enrollment: 39
Semester: Spr. 2016; Overall SOQ Rating: 3.56 (out of 4.0); Avg.GPA: 2.72; Enrollment: 46
Semester: Fall 2015; Overall SOQ Rating: 3.37 (out of 4.0); Avg.GPA: 2.41; Enrollment: 34

EGCE 214L – Engineering Surveying Laboratory

Semester: Fall 2016; Overall SOQ Rating: NA (out of 4.0); Avg.GPA: NA; Enrollment: 26
Semester: Spr. 2016; Overall SOQ Rating: 3.75 (out of 4.0); Avg.GPA: 3.38; Enrollment: 29
Semester: Fall 2015; Overall SOQ Rating: 3.46 (out of 4.0); Avg.GPA: 3.53; Enrollment: 19

EGCE 467 – Railroad Engineering and High Speed Rail

Semester: Fall 2016; Overall SOQ Rating: NA (out of 4.0); Avg.GPA: NA; Enrollment: 44

EGCE 466 – Public Transit Systems Planning and Operations

Semester: Spr. 2016; Overall SOQ Rating: 3.52 (out of 4.0); Avg.GPA: 2.93; Enrollment: 11

Semester: Fall 2015; Overall SOQ Rating: 3.54 (out of 4.0); Avg.GPA: 3.14; Enrollment: 24

EGCE 497 – Senior Project

Semester: Spr. 2016; Overall SOQ Rating: 4.0 (out of 4.0); Avg.GPA: 3.70; Enrollment: 01

SERVICE ACTIVITIES

GRADUATE COMMITTEE CHAIR (in progress)

1. Travis Couch. Maximizing California Express Lane Revenue through Real-Time Traffic Analysis.” Master’s Thesis California State University, Fullerton. (anticipated data) Summer 2017

GRADUATE COMMITTEE MEMBER (in progress)

1. Vandit Shah. “Determining Factors Affecting Success of Public-Private Partnership Projects in the United States.” Master’s Thesis California State University Fullerton. (anticipated data) Spring 2017.
2. Nafiseh Farhadi. “Port Resiliency Analysis and Modeling.” Doctoral Dissertation Louisiana State University. (anticipated data) Spring 2018
3. Nelida Herrera. “Enhancing Guidance for Evacuation Time Estimate Studies.” Doctoral Dissertation Louisiana State University. (anticipated data) Spring 2018.

GRADUATE COMMITTEE MEMBER (Completed)

1. Nafiseh Farhadi. “Quantitative Analysis of Marine Transportation Systems Resiliency.” Master’s Thesis Louisiana State University. Spring 2016
2. Nelida Herrera. “Driver Compliance and Safety Effects of the “Three-Foot” Bicycle Passing Laws.” Master’s Thesis Louisiana State University. Fall 2015.
3. Seyedeh-Maryam Mousavi. “Identifying High-Risk Roadways through Jerk-Cluster Analysis.” Master’s Thesis Louisiana State University. Fall 2015.

SERVICE TO THE DEPARTMENT

1. Departmental Library Committee, 2015 – Present
2. Instructor. Fall 2015 FE/EIT Review Course. Civil and Environmental Engineering Department and CSUF Chapter of ASCE. November, 2015

SERVICE TO THE UNIVERSITY

Assistant Head Coach, “California State - Fullerton Men’s Rugby Club.” Club Sports California State University, Fullerton, Membership Number 2124642. 2015 - Present

SERVICE TO THE COMMUNITY

1. Attendee. Southern California Association of Governments 2016 Regional Conference and General Assembly. La Quinta, CA. May 6 – 7, 2016
2. Invited Speaker. “Mobility Academy.” *San Fernando Valley Council of Governments Mobility Academy*. San Fernando, CA. March 16, 2016

CHAired SESSIONS/MEETINGS

1. Human Factors and Ergonomics Society 2015 International Annual Meeting, Session Chair, Human Performance Modeling, Los Angeles, CA, 2015.
2. Technologies for Critical Incident Preparedness Conference Panelist, First Responders Preparedness and Mitigation Projects: Evacuation Simulation, Washington D.C., 2011

3. 2011 Department of Homeland Security 5th Annual University Summit Panelist, The Role of Transportation Systems in Large-Scale Evacuation Events, Washington D.C., 2011
4. INFORMS Annual Meeting Session Chair, Miscellaneous Applications of OR, Austin, TX 2010

INVITED JOURNAL REVIEWER

1. Reviewer for the American Society of Civil Engineering, *Natural Hazards Review*
2. Reviewer for the *Journal of Emergency Management*
3. Reviewer for the *International Journal of Modelling and Simulation*
4. Reviewer for the *Journal of Transportation Safety Security*
5. Reviewer for the *Journal of Emergency Management*
6. Reviewer for the *Transactions on Intelligent Transportation Systems*
7. Reviewer for the *Transportation Research Record, Journal of the Transportation Research Board*
 - a. ANB80 Task Force on Emergency Evacuation
 - b. ABE40 Standing Committee on Critical Transportation Infrastructure Protection
 - c. AHB25 Committee on Traffic Signal Systems

MAJOR HONORS AND AWARDS

1. Institute of Traffic Engineers LSU Student Chapter Advisor 2015
2. 2012 Clayton Ph.D. Assistantship Supplement Award
3. University Transportation Center, Outstanding Student of Year Award, TRB annual meeting, 2012
4. Graduate School Supplement Award, Louisiana State University, August 2010- May 2014
5. FAA Design Competition for Universities: Airport Management and Planning, 2010
6. Dean's Outstanding Achievement Award, Florida Atlantic University, May 2010
7. Study and Internship Program, German Academic Exchange Services, Aug. 2008-Feb. 2009
8. Summer Study Internship, Department of Homeland Security, Summer 2008
9. Tau Beta Pi, Engineering Honors Society, Fall 2007
10. Florida Bright Futures, Florida Department of Education, Aug. 2004-Dec. 2009