

Fadi Alhomaidat

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EDUCATION

WESTERN MICHIGAN UNIVERSITY, Michigan, USA.

Ph.D. of Civil Engineering/ Transportation, Apr 2019/ GPA: 3.95

- Research topic: "Impact of Freeway Speed Limit on Safety and Operation Speed of Adjacent Arterial Roads."

UNIVERSITY OF TEXAS AT ARLINGTON, Texas, USA.

Master of Civil Engineering / Transportation, May 2015/GPA: 3.75

- Research topic: "Application of moving observer method for estimation of speed and traffic flow in the DFW region in 2015."

MUTAH UNIVERSITY, Mutah, Al-Karak

B.S. in Civil Engineering, Jan 2011

- Senior project: "Improve soil stabilization for base and sub-base road by using chemical material."

WORK EXPERIENCE

AL Hussein Bin Talal University, Ma'an, Jordan

Assistant professor, Jul 2019- up to date

Taught courses: Transportation Engineering, Traffic Engineering, and statistics and probability for engineering

The Southeast Michigan Council of Governments (SEMCOG), Detroit, Michigan, USA

Transportation Modeler, Jan 2019- Jul 2019

- Analyze commercial vehicle and freight data survey to develop a model to assist regional freight planning activities.
- Review the implementation of Activity Based Modeling (ABM) approach instead of four-step model.

WESTERN MICHIGAN UNIVERSITY, Michigan, USA.

Teaching Assistance, Jan 2018- Dec 2018

- Helping to teach and grade transportation planning, survey lab, and Engineering research design.

Research Assistance, May 2015- Jan 2018 RESEARCH PROJECTS:

- FY2017 Data Analysis for Overtime Traffic Enforcement 2017- 2018
Data analysis, generate maps, literature review, and writing report
- An Experimental Investigation of Rider-Influenced Bicycle Dynamics 2015-2016
in a Transportation Environment.
Determine and specify details of the study survey, including sources of information, procedures to be used, and the design of survey. Determine and specify details of the experiment. Monitor and evaluate the experiment progress and performance.
- Integrated Crowd Sensing Platform to Investigate Non-Motorized Behavior 2015-2016
and Risk Factors on Walking, Running and Cycling Routes
Collaborate with other researchers in the planning, implementation, and evaluation the study survey. Consult with bicyclists in order to identify survey needs. Review literature in order to determine and specify details' of study survey. Conduct the survey and collect data. Prepare and present summary and analysis of survey data.

DURRAT ALQASSEM CONTRACTOR COMPANY, Jordan

Site Engineer, Nov 2011- Jan 2013

- Manage and direct staff members and the construction, operations, or maintenance activities at project site.
- Provide technical advice regarding design, construction, or program modifications and structural repairs to industrial and managerial personnel.
- Inspect project sites to monitor progress and ensure conformance to design specifications and safety or sanitation standards.

- Estimate quantities and cost of materials, equipment, or labor to determine project feasibility.
- Test soils or materials to determine the adequacy and strength of foundations, concrete, asphalt, or steel. Compute load and grade requirements, water flow rates, or material stress factors to determine design specifications.
- Analyze survey reports, maps, drawings, blueprints, aerial photography, and other topographical or geologic data to plan projects.
- Direct or participate in surveying to lay out installations or establish reference points, grades, or elevations to guide construction.

HESCO ENGINEERING & CONSTRUCTION COMPANY, Jordan

Site Engineer, Sep 2010- Oct 2011

- Test soils or materials to determine the adequacy and strength of foundations, concrete, asphalt, or steel. Analyze survey reports, maps, drawings, blueprints, aerial photography, and other topographical or geologic data to plan projects.
 - Direct engineering activities to ensure compliance with environmental, safety, or other governmental regulations.
- Inspect project sites to monitor progress and ensure conformance to design specifications and safety or sanitation standards.

PUBLICATIONS AND CONFERENCES

- **Alhomaidat, F.**, Kwigizile, V, and Oh, J (2020) Impacts of freeway speed limit on operation speed of adjacent arterial roads, IATSS Research,
- **Alhomaidat, F.**, Kwigizile, V, Oh, J., and Van Houten, R. (2020) How does an increased freeway speed limit influence the frequency of crashes on adjacent roads?, Accident Analysis & Prevention, 136
- **Alhomaidat, F.**, Kwigizile, V, and Oh, J. (2019). Impacts of Freeway Speed Limit on Operation Speed of Adjacent Arterial Roads. Presented at the 98th Annual Meeting of the Transportation Research Board (TRB), January 2019, Washington, D.C.
- **Alhomaidat, F.**, Kwigizile, V, and Oh, J. (2019). Cycling Risks and Needs Perception of Different Skill Levels and Age Groups. Presented at the 98th Annual Meeting of the Transportation Research Board (TRB), January 2019, Washington, D.C.
- **Alhomaidat F**, Kwigizile V, Oh J, Al-fuqaha A, and Mohammadi S: The Relationship between Cycling Risk Perception and Skill Level of Different Age Groups. Presented By Alhomaidat at 6th Annual International Cycling Safety Conference, Davis, California, USA, September 2017.
- Acosta L, and **Alhomaidat F**: How does the pedestrian-driver behavior influence the number of crashes. Presented by Alhomaidat at Great lakes district Annual meeting, Lansing, Michigan, June 2017. **Alhomaidat F**:
- Analyzing Grand Rapids' Pedestrian Crash Data Spatially Presented at IMGIN's 2017 Annual Conference, Travers City, Michigan, June 2017.
- **Alhomaidat F**, and Ardekani S: A Statistical Comparison of Traffic Measurements from the Moving versus Stationary Observer Methods. Journal of Transportation Technologies, 5, 204 -2013 doi: 10.4236/jtts.2015.54019.
- Oh, J. S., Kwigizile, V., Ro, K., Feizi, A., Kostich, B. W., Hasan, R. A. H., & **Alhomaidat, F.** (2017). Effect of Cycling Skills on Bicycle Safety and Comfort Associated with Bicycle Infrastructure and Environment (No. TRCLC 15-01). Western Michigan University. Transportation Research Center for Livable Communities. Al-Fuqaha, A., Mohammadi, S., Oh, J. S., Kwigizile, V., & **Alhomaidat, F.** (2017). Integrated Crowdsourcing Platform to Investigate Non-Motorized Behavior and Risk Factors on Walking, Running, and Cycling Routes (No. TRCLC 15-06).

AWARDS AND HONORS

- **ITE 2017 student paper winner** Oct 2017, Institute of Transportation Engineering Paper title "cycling risk perception and skill level of different age groups."
- **2nd place IMAGIN's student best paper award** Apr 2017, IMAGIN "improving Michigan Access to Geographic Information System" Paper title "Analyzing Grand Rapids' Pedestrian Crash Data Spatially" **2nd**
- **Place Best Poster Award** Jun 2016, Third Annual Summer Conference on Livable Communities Poster Title "An Experimental Investigation of Rider-Influenced Bicycle Dynamics in a Transportation Environment"
- **Ph.D. Full Scholarship from Alhussien Bin Talal University** Aug 2015, to earn Ph.D. degree in Transportation engineering from WMU.

- **Master. Full Scholarship from Alhussien Bin Talal University** Aug 2015, to earn Master degree in Transportation engineering from UTA

ADDITIONAL SKILLS

- Design and Simulations: VISSIM, SYNCHRO, Trans CAD, GIS, HCS 2010, AutoCAD, and Microstation
Technical design, analysis skills, and computational techniques.
- Personal attributes: Good communication, planning and organizational skills. Experience of working and managing within a changing environment. Self -motivator and the ability to motivate others.