

Mohammad Elayan, MSc

PhD Student and Graduate Research/Teaching Assistant

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Department of Civil & Environmental Engineering, University of Nebraska-Lincoln

Profile

I am a PhD student and a Graduate Research Assistant at the University of Nebraska-Lincoln. With over 9 years of experience as a transportation engineering professional in Dubai, UAE, I have contributed to more than 100 projects. My research includes various aspects of transportation engineering, and I have co-authored four publications.

Education

- **PhD in Civil Engineering – Transportation Engineering**
University of Nebraska-Lincoln, Lincoln, NE, USA
GPA: 4.000 2023–Present
- **MSc in Civil Engineering – Transportation Engineering**
Jordan University of Science and Technology, Irbid, Jordan
GPA: 91.6% (Rank: 1) 2011–2013
- **BSc in Civil Engineering – Transportation Engineering**
Jordan University of Science and Technology, Irbid, Jordan
GPA: 82.3% (Rank: 16) 2006–2011

Research

Google Scholar Profile: scholar.google.com

ORCID: 0009-0001-2562-5694

Total Citations: 72

Peer-Reviewed Publications

- Al-Khateeb, G., Al-Suleiman, T., Khedaywi, T., Elayan, M. (2016). “Studying Rutting Performance of Super-pave Mixtures Using Unconfined Dynamic Creep and Simple Performance Tests.” *Road Materials and Pavement Design*, Vol. 19 (2).
- Alsheyab, M., Khedaywi, T., Elayan, M. (2013). “Laboratory Study on Solidification/ Stabilization of Unwanted Medications Using Asphalt as a Binder.” *Journal of Material Cycles and Waste Management*, Vol. 15 (2).
- Al-Suleiman, T., Elayan, M. (2013). “Gap Acceptance Behavior at U-turn Median Openings – Case Study in Jordan.” *Jordan Journal of Civil Engineering*, Vol. 7 (3).

Experience

University of Nebraska-Lincoln, Lincoln, NE, USA

Graduate Research Assistant

January 2023–Present

Graduate Teaching Assistant

January 2024–Present

- Part of Dr. Jason Hawkins’s research team at the Nebraska Transportation Center, focusing on transportation safety, planning, and advanced technologies for EVs and AVs.
- Teaching Assistant for Civil Engineering Analysis II and Principles of Transportation Engineering.

TrafQuest, Dubai, UAE

Senior Transportation Engineer

Transportation Engineer

January 2019–January 2023

June 2013–January 2019

- Managed over 100 projects, including strategic transportation studies in the UAE and MENA region.
- Key tasks included travel demand forecasting, traffic analysis, roadway network performance evaluation, transport integration, and safety analysis.

Jordan University of Science and Technology, Irbid, Jordan

Research Assistant

Teaching Assistant

2011

2012–2013

- Conducted research on highway material performance and traffic operations optimization.
- Taught laboratory courses in Surveying, Highway Materials, and Engineering Statics.

Core Capabilities

- **Traffic analysis, Transport planning, Traffic management, Transport modeling**
- **Crash analysis, Geometric design, Statistical analysis, Research, Machine learning**
- **Software: Python, R, Julia, ArcGIS, QGIS, VISSIM, Synchro, SIDRA, SPSS**