Maryam Hamidi, Ph.D.

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EDUCATION

M.S., Computer Science , Lamar University, Beaumont, TX   May 2023 - May 2026

Ph.D., Systems and Industrial Engineering   Aug 2011 - May 2016
University of Arizona, Tucson, AZ

M.B.A, Sharif University of Technology, Iran   Aug 2008 - May 2010

B.S., Electrical Engineering   Aug 2002 - May 2007
Amir-Kabir University of Technology, Iran

PROFESSIONAL EXPERIENCE

Associate Professor, Department of Industrial Engineering   Sept 2022 - Present
Center for Advances in Port Management, Lamar University

Assistant Professor, Department of Industrial Engineering   Sept 2016 - Sep 2022
Center for Advances in Port Management, Lamar University

SELECTED FUNDED RESEARCH PROJECTS

1. **Automatic Identification System (AIS) Application - Gulf Intracoastal Waterway**, (8/2023-01/2025). PI - **Hamidi, M.**, Funded by Texas Department of Transportation.

2. **Machine Learning-based Anomaly Detection for Pump Monitoring Using Auditory Data**, (12/2022). PI - Zhang, J., Co-PI - **Hamidi, M.**, Funded by Buckeye Partners.

3. **Deep Learning-based Auditory Anomaly Detection and Classification for Natural Gas Compressors**, (05/2021-12/2021). PI - Zhang, J., Co-PI - **Hamidi, M.** Funded by Well Checked Systems International, OK.

4. **A Railyard Management Software**, (12/2020-12/2021). PI - **Hamidi, M.**, Co-PI - Craig, B., Funded by Iron Horse Terminals, TX.

SELECTED PUBLICATIONS

* denotes student coauthor, @ denotes corresponding author

1. Arbabkhah, H.*, Sedaghat, A.*, Jafari, M.*, & **Hamidi, M.**[@] (2024). "Automatic Identification System-based prediction of tanker and cargo estimated time of arrival in narrow waterways", *J of Marine Science and Eng.* 12 (2), 215.

2. Sedaghat, A.*, Arbabkhah, H.*, Jafari, M.*, & **Hamidi, M.** [@](2024). "Deep learning applications in vessel dead reckoning to deal with missing AIS data". *Journal of Marine Science and Engineering.* 12 (1), 152.

3. Zohoori, S.*, Jafari, M.*, **Hamidi, M.**[@], & Maihami, R. (2023). An AIS-based data analytic approach for measuring waterway resiliency: a case study of Houston Ship Channel. *Maritime Policy & Management*, 50 (6), 797-817.

4. Mobtahej, P.*, Zhang, X.*, **Hamidi, M.**[@] & Zhang, J. (2022). "An LSTM-Autoencoder architecture for anomaly detection applied on compressors audio data". *Computational and Mathematical Methods.* 2022 (1), 3622426.

5. Zohoori, S.*, Roy, U.*, **Hamidi, M.**[@], & Wu, X. (2022). "Quantifying widebody vessels navigation delay in narrow waterways: a case study at Houston Ship Channel". *Journal of Waterway, Port, Coastal, and Ocean Engineering,* ASCE, 148(4), 04022010.

6. Kabir, M.*, Jafari, M.*, Wu, X., & **Hamidi, M.** (2022). Study of U-turn behavior of vessels in Houston Ship Channel using AIS Data. *Ocean Engineering*, 246, 110608.

7. Jafari, M.*, Zohoori, S.*, **Hamidi, M.**[@], & Wu, X. (2022). Study of narrow waterways congestion based on Automatic Identification System (AIS) Data. *Journal of Ocean Engineering and Science*, 7 (6), 578-595.

8. Zohoori, S.*, Jafari, M.*, **Hamidi, M.**[@] & Craig, B. (2021). A vectorized algorithm for waterway traffic analysis using AIS data. *Journal of Ocean Technology*, 16(4).

9. Wu, X., Roy, U.*, **Hamidi, M.**, & Craig, B. (2020). Estimate travel time of ships in narrow channel based on AIS data. *Ocean Engineering*, 202, 106790.

10. Kaneria, A.*, **Hamidi, M.**[@], Zhu, W., & Craig, B. (2019). Traffic simulation of Houston Ship Channel for assessing the impact of waterway closures on vessel waiting time. *Journal of Waterway, Port, Coastal, and Ocean Engineering,* ASCE, 145(4), 04019014.

11. Rahimi, B.*, Abedi, A.*, **Hamidi, M.**[@], & Cho, J. (2018). Simulation modeling of Houston Ship Channel vessel traffic for optimal closure scheduling. *Simulation Modelling Practice & Theory,* 80, 89–103.

Selected STUDENT MENTORING

Doctoral Dissertation (Serving as Chair)

1. Sepideh Zohoori, "Quantifying waterway traffic conditions using AIS data and optimizing vessel schedule", Industrial Engineering, **Graduated 08/2021**.

2. Masood Jafari, "Quantifying waterway congestion and predicting pilot demand" , Industrial Engineering, **Graduated 08/2021**.

3. Pooyan Mobtahej, "Deep Learning-based anomaly detection and prediction for midstream infrastructure", Industrial Engineering, **Graduated 05/2023**.

4. Atefe Sedaghat, "Real-time vessel tracking and location prediction using AIS data: a case study of Gulf Intracoastal Waterway", Industrial Engineering, **Graduated 08/2024**.

PROFESSIONAL SOCIETIES & ACTIVITIES

Handling Editor, Transportation Research Record , Since 2020
Guest Editor, Sustainability, Special Issue, Maritime Research: Sustainable Shipping and Port Management.
Guest Editor, Informatics, Special Issue, Building Smart Cities and Infrastructures for a Sustainable Future.
Member of Transportation Research Board (TRB)
Member of Institute of Industrial Engineering
Member of INFORMS, Society of Reliability Engineers
Western Decision Science Institute.
Member of Women in Operations Research and Management Science (WORMS)