

AMIN HOSSEININASAB

Warrington College of Business
University of Florida
Stuzin Hall 256
Gainesville, FL, 32611

Email: amin.hosseininasab@warrington.ufl.edu
Phone: +1 (352) 273-3288
Website: sites.google.com/view/aminh/

EMPLOYMENT

Warrington College of Business, University of Florida Aug. 2020 - Present
Assistant Professor of Marketing.

EDUCATION

Tepper School of Business, Carnegie Mellon University May 2020
PhD in Operations Research, minor in Machine Learning.

Tepper School of Business, Carnegie Mellon University May 2016
MSc in Operations Research

University of Waterloo Jan. 2015
MSc in Management Science

Amirkabir University of Technology May 2012
BSc in Industrial Engineering and Management Systems

RESEARCH INTERESTS

Methodologies: Machine learning; Interpretable machine learning; Sequential pattern mining; Mathematical Programming.

Applications: Quantitative marketing; Data-driven decision making; Fairness in AI; Causality in machine learning; E-Commerce; Healthcare markets; Financial markets; Operations.

PUBLICATIONS

Kadioğlu, S., Wang, X., **Hosseininasab, A.**, and van Hoeve, W.J., 2023. Seq2Pat: Sequence-to-Pattern Generation to Bridge Pattern Mining with Machine Learning *AI Magazine*, 44 (1), 54-66.

Wang, X., **Hosseininasab, A.**, Colunga, P., Kadioğlu, S., and van Hoeve, W.J., 2022. Seq2Pat: Sequence-to-Pattern Generation for Constraint-based Sequential Pattern Mining. *Proceedings of the AAAI Conference on Artificial Intelligence*, 36 (11), 12665-12671.

Hosseininasab, A., van Hoeve, W.J. and Cire, A.A., 2019. Constraint-Based Sequential Pattern Mining with Decision Diagrams. *Proceedings of the AAAI Conference on Artificial Intelligence*, 33 (01), 1495-1502.

Hosseininasab, A., van Hoeve, W.J., 2021. Exact Multiple Sequence Alignment by Synchronized Decision Diagrams. *INFORMS Journal on Computing*, 33 (2): 721-738.

Hosseininasab, A. and Gzara, F., 2020. Effects of Feasibility Cuts in Lagrangian Relaxation for a Two-stage Stochastic Facility Location and Network Flow Problem. *Optimization Letters*, 14 (1), 171-193.

Hosseininasab, A. and Ahmadi, A., 2015. Selecting a Supplier Portfolio with Value, Development, and Risk Consideration. *European Journal of Operational Research*, 245 (1), 146-156.

For a complete list visit: <https://scholar.google.com/citations?user=uCC6V14AAAAJhl=en>

WORKING PAPERS

Hosseininasab, A., van Hoeve, W.J. and Tayur, S. - Provider Network Selection and Plan Personalization in Health Insurance Design. (First round revision at Manufacturing & Service Operations Management)

- **Runner up**, College of Healthcare Operations Best Paper Competition 2023, Orlando, Florida. May 2023

Hosseininasab, A., van Hoeve, W.J. and Cire, A.A. - Memory Efficient Tries for Sequential Pattern Mining. (First round revision at Journal of Machine Learning Research)

Hosseininasab, A., van Hoeve, W.J. - Explaining and Reducing User Dissatisfaction in Recommender Systems. (Submitted to Management Science)

- **Runner up**, 14th INFORMS Workshop on Data Mining & Decision Analytics best paper competition, Seattle, Washington. Oct. 2019

Hosseininasab, A., Kumar, A., Zhao, V. - Learning Product Design from Consumer Reviews. (In preparation)

Hosseininasab, A., Shugan, S. M. - Learning From Imbalanced Data. (In preparation)

Lin, W., **Hosseininasab, A.**, Hoover, J. - Learning to Make Fair Decisions. (In preparation)

Zhang, Z., **Hosseininasab, A.** - Generating Fair Recommendations via Large Language Models. (In preparation)

Verma, S., Tayur, S., **Hosseininasab, A.** - Impact of the Price Transparency Act on Design of Provider Networks. (In preparation)

Hosseininasab, A., Song, T., Shin W. - AI-Generated Review Summary. (In preparation)

SELECTED TALKS

Provider Network Selection and Patient Targeting in Health Insurance Markets

- POMS 2023, Orlando, Florida. May 2023

Deep Learning Based Casual Inference for Large-Scale Combinatorial

Experiments: Theory and Empirical Evidence.

- Discussant - Annual Bass FORMS Conference, Dallas, Texas. Mar. 2023
- Provider Network Selection and Patient Targeting in Health Insurance Markets**
- ISMS Marketing Science 2022, Online. Jun. 2022
- The Economic Value of Norm Conformity and Menu-Opt-Out Costs**
- Discussant - Annual Bass FORMS Conference, Online. Mar. 2022
- The Provider Network Selection Problem in Healthcare Markets**
- INFORMS Annual meeting, Anaheim, California. Oct. 2021
- Structure Mining for Interpretable Data-driven Sequential Decision Making**
- INFORMS Annual meeting, Seattle, Washington. Oct. 2019
- Explaining User Skips in Music Streaming Platforms via Interpretable Machine Learning**
- 14th INFORMS Workshop on Data Mining & Decision Analytics, Seattle, Washington. Oct. 2019
- Mining Knowledge from Sequential Data**
- POMS Annual Meeting, Washington, DC. May 2019
- Constraint-based Sequential Pattern Mining by Decision Diagrams**
- AAAI Conference on Artificial Intelligence, Honolulu, Hawaii. Feb. 2019
 - INFORMS Computing Society, Knoxville, Tennessee. Jan. 2019
 - INFORMS Annual Meeting, Phoenix, Arizona. Nov. 2018
- Exact Multiple Sequence Alignment by Synchronized Decision Diagrams**
- INFORMS Annual Meeting, Houston, Texas. Oct. 2017
- A Time-Constrained Pickup and Delivery Problem: Formulation and Solution by Two-level Logic-Based Benders Decomposition**
- INFORMS Annual Meeting, Nashville, Tennessee. Nov. 2016

TEACHING EXPERIENCE

- Machine Learning Methods for Business Applications (PhD)** Spring 2021-2023
- Marketing Analytics I (MSBA)** Spring 2021-2023,
Fall 2023
- Mathematical Models for Consulting (undergraduate)** Spring 2020

INDUSTRY EXPERIENCE

- Data Analyst (Summer Intern)**
Fedex Ground, Moon township, PA. Jun. - Aug. 2018
- Design and implementation of structure mining for vehicle routing.

- Model and implementation of load plan optimization for hub and spoke network.

Strategic Planner (Summer Intern)

Kavir TY, Science and Technology Park, Yazd, Iran.

Jun. - Sep. 2011

- Statistical data analysis to identify and establish key factors in strength and weaknesses of Bafgh ore mine.
- Member of a team to establish strategic priorities for Bafgh ore mine.

AWARDS AND HONORS

- Finalist, College of Healthcare Operations best paper competition, Orlando, Florida. 2023
- SCM Center Research Award 2022
- 2nd place, 14th INFORMS Workshop on Data Mining & Decision Analytics best paper competition, Seattle, Washington. 2019
- Nominated as one of seven PhD students from Carnegie Mellon University for Schmidt Science Fellowship (university wide). 2019
- Certificate for teaching excellence, University of Waterloo. 2014
- Best student paper award in Industrial Engineering and Management Systems, Amirkabir University of technology. 2012
- 1st place, regional and provincial programming Olympiads, Yazd, Iran. 2008

PROFESSIONAL SERVICE

- Session chair and organizer, Machine Learning for Marketing Applications, INFORMS Annual meeting, Anaheim, California. Oct. 2021
- Session chair and organizer, Data-driven Decision Making and Decision Diagrams, INFORMS annual meeting, Seattle, Washington. Oct. 2019
- Treasurer, INFORMS Student Chapter at Carnegie Mellon University. 2018