

Applied Operations Research Lab

Department of Industrial and Systems Engineering

308A Bell Hall

University at Buffalo

Updated: 9/15/25

Lab Coordinator:



Rajan Batta, SUNY Distinguished Professor

Applications of Operations Research, especially those in humanitarian relief operations and in military mission planning

Doctoral Students:



Krystal Coleman

Degree Program: Doctor of Philosophy, Industrial and Systems Engineering

Dissertation Title: TBD

Current Research: Graph Machine Learning in Combinatorial Optimization

Web information: [LinkedIn](#) | [Krystal Coleman](#)



Mina Samiei Nasab

Degree Program: Doctor of Philosophy, Industrial and Systems Engineering

Dissertation Title: TBD

Area of Study: Applications of Operations Research, Machine Learning, and Deep Learning

Journal Publications:

1. Samieinasab, M., Hamid, M., Rabbani, M. (2022). An integrated resilience engineering-lean management approach for performance assessment and improvement of the clinical departments, *Socio-Economic Planning Sciences*.
2. Torabzadeh,S.A., Tavakkoli-Moghaddam, R., Samieinasab, M., Hamid, M. (2022). An intelligent algorithm to evaluate and improve the performance of a home healthcare center considering trust indicators, *Computers in Biology and Medicine*.
3. Samieinasab, M., Torabzadeh,S.A, Hamid, M.,& Sheikalishahi, M. (2022). Intensive care unit and ward beds capacity planning in a heart surgical theater using a combination of simulation, Best-Worst method, and VIKOR, *International Journal of System Assurance Engineering and Management*, under review.
4. Alipour-Vaezi,M., Tavakkoli-Moghaddam, R., Samieinasab, M. (2022). Scheduling the COVID-19 vaccine distribution based on data-driven decision-making methods, *Journal of Industrial Engineering and Management Studies*.
5. Samieinasab, M., Torabzadeh, S. A., Behnam, A., Aghsami, A., & Jolai, F. (2021). Meta-Health Stack: A new approach for breast cancer prediction, *Healthcare Analytics*.

Web Information: [LinkedIn | Mina Samiei nasab](#)



Tara Schroth

Degree Program: Doctor of Philosophy, Industrial and Systems Engineering

Dissertation Title: TBD

Area of Study: Applications of Operations Research

Web information: [LinkedIn | Tara Schroth](#)



Ting Zan

Degree Program: Doctor of Philosophy, Industrial and Systems Engineering

Dissertation Title: TBD

Area of Study: Data-driven Operations Research and AI for Emergency Response, Reinforcement Learning

Web Information: LinkedIn | Ting Zan: <https://www.linkedin.com/in/ting-zan-73112a290/>

Master's Students: _____

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For information on former students of the lab, publications, etc., please go to
www.acsu.buffalo.edu/~batta