



Dept. of Industrial and Systems Engineering (ISE)  
Rossin College of Engineering and Applied Science  
Lehigh University, Harold S. Mohler Laboratory



Dr. Karmel S. Shehadeh, PhD  
Assistant Professor of ISE  
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**Subject:** Postdoctoral Research Associate Position

**Location:** Department of Industrial and Systems Engineering (ISE), Lehigh University

**Mentor:** Prof. Karmel S. Shehadeh, Assistant Professor, Department of ISE, Lehigh University

**Position and Duration:** The duration is one year, with a potential extension. The position would start on a mutually agreed-upon date. Applications will be reviewed immediately until the position is filled. The appointment is an exempt position and qualifies for the university's benefits (<https://hr.lehigh.edu/benefits>).

**Requirements/Qualifications:**

- Qualified candidates should have or be close to completing a doctorate degree in industrial engineering, operations research, statistics, or machine learning and have a strong research record.
- Qualified candidates should have prior research and publications in optimization under uncertainty methodologies and their applications. Preferences will be given to candidates with experience in one of the following areas: (1) distributionally robust optimization, or (2) fairness in optimization and/or ML.
- Strong writing and verbal communication skills are required.

**Job Responsibilities:** The incoming Postdoctoral Researcher will work on fundamental or applied research in Prof. Shehadeh's research group, with the possibility of conducting multidisciplinary research with faculty colleagues within and outside Lehigh. The group's mission is to push the boundaries of stochastic and robust optimization and foster interdisciplinary research collaborations to address emerging real-world problems in various application domains, including healthcare, facility location, and transportation. The Postdoctoral Researcher is expected to specifically contribute to Shehadeh's group mission in one or both of the following areas: (i) develop the next generation of data-driven distributionally robust optimization methodologies to address uncertainty in risk-aware stochastic optimization problems and (ii) develop advanced fairness-promoting stochastic optimization frameworks. In coordination with Professor Shehadeh, the Researcher will lead the research team in writing manuscripts, disseminating findings at scientific meetings, preparing grant applications, and supporting the supervision of doctoral students. The Researcher is expected to participate in the scientific activities of Lehigh ISE.

**How to apply:** A formal application includes a cover letter, curriculum vitae, research statement (at most 3 pages), and list of at least 3 references. Applications should be sent by email to [kas720@lehigh.edu](mailto:kas720@lehigh.edu) with the subject line [Postdoctoral Researcher] Name of Candidate. Informal inquiries before a formal application are welcome.

**Institution:** Lehigh University is an affirmative action/equal opportunity employer and does not discriminate on the basis of age, color, disability, gender, gender identity, genetic information, marital status, national or ethnic origin, race, religion, sexual orientation, or veteran status.