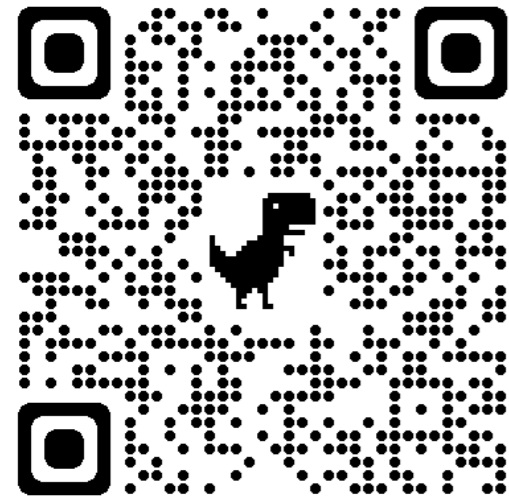# BERKS AIMS LAB
Seminars

April 1 | 09:00-10:00 AM

Online

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PREDICTIVE AND PRESCRIPTIVE ANALYTICS IN HUMANITARIAN SUPPLY CHAINS: INSIGHTS FROM FOOD BANK OPERATIONS

DR. LAUREN DAVIS

PROFESSOR
DEPARTMENT OF INDUSTRIAL & SYSTEMS ENGINEERING AT NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY

This event is co-hosted by

PENN STATE'S AI WEEK | APRIL 1-5 2024

During the past decade, an increasing number of natural disasters and humanitarian emergencies have prompted significant research in the area of relief chain logistics and supply chain management. Much of the research has focused on challenges associated with stocking and distribution of relief supplies in response to sudden-onset disasters. However, issues surrounding slow onset and persistent disasters (like food insecurity) present a unique set of challenges, particularly with respect to the management and distribution of donated supplies. Based on a partnership with a local non-profit hunger relief organization, we describe the relief supply chain associated with the provision of food aid to populations suffering from hunger. We present predictive and descriptive models that quantify the availability of supply over time, characterize demand, and optimize the distribution of uncertain supply to ensure equity and improve access. Implications of our findings on operational efficiency and service delivery are discussed.

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Individuals with disabilities are welcome at this event. Please contact Dr. Konak (konak@psu.edu) with any questions or special needs.

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