CAOE | CENTER FOR ACCELERATING OPERATIONAL EFFICIENCY

A DEPARTMENT OF HOMELAND SECURITY CENTER OF EXCELLENCE

Seminar Series

Operations Research for COVID-19

10AM PT/ 1PM ET

COVID-19 has posed unprecedented challenges to modern society, and the extent of the virus spread has become a great threat to the U.S., calling for timely decisions to prevent and mitigate further negative consequences. Many challenges have emerged related to vaccine roll-out logistics, healthcare capacity planning, and personal protective equipment distribution, among others. This seminar series is designed to provide a sample of ongoing works on operations research decision-making models related to multiple aspects of COVID-19.

Each one-hour seminar will begin at 10am PT/1pm ET and will include a Q&A period at the end of each presentation.

Schedule of Speakers

January 28
Modeling and Data Analysis for COVID-19 Healthcare Demand Projections in Arizona
Esma Gel
Associate Professor, Industrial Engineering in the School of Computing, Informatics and Decision Systems Engineering (CIDSE)
Arizona State University

February 11
COVID-19 Diagnosis and Viral Load Reporting: A Theory of over-diagnosis and under-testing
Tinglong Dai
Associate Professor of Operations Management and Business Analytics with joint faculty appointments at the Johns Hopkins School of Nursing.
Johns Hopkins University

February 25
Operations Research Models for Local Coronavirus Outbreaks
Edward Kaplan
William N. and Marie A. Beach Professor of Operations Research, Public Health, and Engineering
Yale University

March 11
Novel Supply Chain Network Models Inspired by the COVID-19 Pandemic - From Optimization to Game Theory
Anna Nagurney
John F. Smith Memorial Professor at the Isenberg School of Management
University of Massachusetts Amherst

March 25
Design of COVID-19 Staged Alert Systems to Ensure Healthcare Capacity with Minimal Closures
Dave Morton
Sachs Professor and Department Chair in Industrial Engineering & Management Sciences
Northwestern University

The series runs January 28 – April 22, 2021. New speakers are still being added. Please email caoe@asu.edu to be added to the mailing list for speaker updates and seminar links.