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and Director

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Dr. Mohammad T. Khasawneh is a SUNY Distinguished Professor and Director of the School of Systems Science & Industrial Engineering at Binghamton University. He received his Ph.D. in Industrial Engineering from Clemson University, South Carolina, in August 2003, and his B.S. and M.S. in Mechanical Engineering from Jordan University of Science and Technology, Jordan, in 1998 and 2000, respectively. Dr. Khasawneh's research is focused on healthcare systems engineering. Dr. Khasawneh currently serves as the Director for the Watson Institute for Systems Excellence (WISE), an institute for advanced studies that generates 3-4 million US\$ in research funds annually. In addition, he currently serves as the founding director of the Healthcare Systems Engineering Center, an organized research center (ORC) at Binghamton University.

Since 2003, Dr. Khasawneh has been leading a wide spectrum of projects with U.S. hospital systems that focus on applied research in the area of healthcare systems engineering and operations management. More specifically, his research is focused on the novel application of systems engineering to transform healthcare systems into high-performance environments that produce better patient outcomes at lower costs. His work is applied in ways that lead to optimal healthcare, including more efficient use of hospital resources; better outpatient scheduling; streamlined patient flow; improved patient satisfaction; reduced hospital-acquired conditions (e.g., infections and patient falls) through predictive analytics; and improved clinical, operational and financial performance using advanced data science methods.

His health systems engineering center generates over \$1.5 million annually in sponsored research from various healthcare and hospital systems. Building on a successful research program and partnerships with health systems around the country and an academic concentration/minor, at the graduate/undergraduate levels, Dr. Khasawneh developed a 12-month Executive Master of Science with a Health Systems Concentration, which has been offered in Manhattan since 2013. He also helped develop a new M.S. degree program in Healthcare Systems Engineering, which has been offered at Binghamton University since 2018.

Over the years, Dr. Khasawneh presented his research at various national and international conferences, including China, India, Mexico, Jordan, Korea, Thailand, Japan, Turkey, Indonesia, and Canada. Dr. Khasawneh's research activities thus far have led to 90+ refereed journal articles, 175+ conference articles, one patent, and three new invention disclosures. In addition, his sponsored research efforts thus far have resulted in over \$25 million in external funding and over \$39 million in software/equipment grants. Since 2003, Dr. Khasawneh graduated 43 doctoral students and 120+ MS students with the thesis option.

In 2006, Dr. Khasawneh received a U.S. Air Force Summer Faculty Fellowship to evaluate the use of multi-sensory cues to improve the landing of unmanned aerial vehicles. In 2009, he received another fellowship from the U.S. Air Force Office of Scientific Research to design ergonomic computer workstations for very large displays. Dr. Khasawneh received the State University of New York (SUNY) Chancellor's Award for Excellence in Teaching in 2011, the University Award for Outstanding Graduate Director in 2015, the University Award for Excellence in International Education in 2016, and the SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities in 2021. He is a member of the Alpha Pi Mu and Alpha Epsilon Lambda honor societies.

Dr. Khasawneh also holds the Diplomate status with the Society for Health Systems (SHS), a professional society within the Institute of Industrial and Systems Engineers (IISE) that supports the industrial engineering profession and individuals involved with improving quality and productivity within healthcare. Dr. Khasawneh is also an IISE Fellow, the highest classification of the IISE membership.