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## Multi criteria decision making for choosing a robot for the evolving industrial setting

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This paper focuses on the industrial robot selection process. As technology progresses, the industrial setting is experiencing changes that were not seen before. Currently the industrial setting is looking at processes that are more effective and robots that are more energy efficient as costs rise over time. Humans and robots are beginning to break the distance barrier by working closer each time. At the moment there is no multi criteria decision making applications that add safety or energy expenditure. If these factors are considered, the results will better fit the fast changing industrial setting. Decision makers will be able to make accurate decisions for the adapting industry.

### Biography

Tariq Tashtoush is a Visiting Assistant Professor of Systems Engineering in Texas A&M International University (TAMIU), Laredo, TX. He got his PhD and MS degrees in Systems and Industrial Engineering from State University of New York at Binghamton on 2013 and 2009, respectively and his BS in Electromechanical (Mechatronics) Engineering for Jordan University of Science and Technology (JUST), Irbid, Jordan on 2005. Throughout his working experience and formal education in multidiscipline of engineering, he acquired a sound knowledge and experience of leading edge engineering principles, tools and practices in the field of simulation and systems design, production quality and management, lean manufacturing principles, robotics and automation, 3D printing processes, engineering statistical analysis, project management, optimization, instruments and electrical devices, reliability, Healthcare Systems, and Human Factors. He is Lean Six-Sigma Black Belt certified, he worked at Continental Automation Systems, where he implemented Lean manufacturing and Six-Sigma principles, machine production control, preventive maintenance scheduling, and quality monitoring to reduce non-added value actions and increase productivity and the production lines' throughput. His research interests lie in the area of systems designs and optimization, production quality, electronics manufacturing, electronics reliability and robotics.

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