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Selection process of industrial robots

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In this workshop we will be discussing the selection process of a suitable industrial robot depending on the process requirements and constraints. With the current fast pace in technology advancement and mass production requirements, manufacturer and industrial processes should expand in order to fit the required demand. The current manufacturing processes should become more effective which include utilizing a more energy efficient and robust robots. In addition, better Humans-Robotics interaction should be analyzed and included as decision criterion. Current multi criteria decision making does not include robot safety and energy consumption.

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 degree in Systems and Industrial Engineering from State University of New York at Binghamton in 2013 and 2009, respectively and his BS in Electromechanical (Mechatronics) Engineering from Jordan University of Science and Technology (JUST), Irbid, Jordan in 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 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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