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ISA Transactions is a journal of advances and state-of-the-art in the science and engineering of measurement and automation, of value to leading-edge industrial practitioners and applied researchers.

The topics of measurement include: sensors, perception systems, analyzers, signal processing, filtering, data compression, data rectification, fault detection, inferential measurement, soft sensors, hardware interfacing, etc.; and any of the techniques that support them such as artificial intelligence, fuzzy logic, communication systems, and process analysis. The topics of automation include: statistical and deterministic strategies for discrete event and continuous process control, modelling and simulation, event triggers, scheduling and sequencing, system reliability, quality, maintenance, management, loss prevention, etc.; and any equipment, techniques and best practices that support them such as optimization, learning systems, strategy development, security, and human interfacing and training.

The intended audience is research and development personnel from academe and industry in the fields of control systems, process instrumentation, systems, and automation.

The journal seeks to bridge the theory and practice gap. This balance of interests requires simplicity of technique, credible demonstration, fundamental grounding, and connectivity to the state of the art in both theory and practice.

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INTRODUCTION

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