OUTGROWING THE FACTORY,
AUTOMATION EVOLVES FROM CRAFT TO SCIENCE

Influential New IEEE Journal Charts Future of Automation Science

Storrs, CT (July 10, 2006) – How will the world’s 32 million books be accurately scanned for inclusion in the universal digital library?

The answer lies in highly efficient, highly reliable, page turning and scanning machines that exemplify the latest in automation science, an emerging field that is the focus of an increasingly influential new journal, the IEEE Transactions on Automation Science and Engineering (T-ASE)

While automation has its roots in the automobile industry, the digitization of the world’s books is just the latest example of how automation is rapidly expanding beyond traditional manufacturing to transform society, industry, and everyday life.

Launched in July 2004 as the first journal devoted exclusively to automation science, T-ASE has quickly emerged as the field’s leading source of groundbreaking research that studies efficiency, productivity, quality, and reliability across a range of areas and industries – from voting booths to toll booths to security in art galleries.

“When most people hear the term ‘automation,’ they think of assembly lines,” said T-ASE Editor-in-Chief Peter Luh, a professor of engineering at the University of Connecticut. “It’s important to get beyond this misconception. By publishing research that reflects how automation can be applied in different contexts, T-ASE has attracted readers across a wide range of disciplines.”

“Automation today is where computer technology was in the early sixties, a patchwork of ad-hoc solutions lacking a rigorous scientific methodology,” said Ken Goldberg, chair of the T-ASE Advisory Board. “T-ASE is playing a critical role in establishing the foundation for a science of automation.”

Since its launch two years ago, T-ASE has published research papers, theories, and case studies on emerging topics such as automated genetic screening, how to manipulate embryonic cells, efficient assembly of nano-scale structures, and new methods to save
energy using home automation. These articles are stirring discussion among researchers, engineers, and industrial practitioners around the world.

The journal has already published several special issues dedicated to emerging areas where automation is making a greater impact, such as life sciences, nano-scale automation, and assembly. A much-anticipated special issue slated for spring 2007 will look at the role that automation will play in the home.

“Beyond factories, scientific approaches to automation will change how we travel, how we garden, and how we vote,” said Goldberg

T-ASE grew out of the IEEE Transactions on Robotics and Automation (T-RA), the top-ranked journal for research in Robotics. “The word ‘robot’ was coined in 1923, while the word ‘automation’ wasn’t coined until 1947,” said Goldberg. “Automation has been the less glamorous, hardworking stepchild. This journal is helping to bring automation out from behind the scenes into the spotlight.”

To learn more, visit www.ieee.org/t-ase.