Future Trend of Robotic and Automation (Circuit and System)

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ABSTRACT

According to a study, the skills gap may leave an estimated 2.4 million positions – more than half the manufacturing jobs – unfilled between 2018 and 2028. The Society of Manufacturing Engineers (SME) also reports that 89% of manufacturers are having difficulty finding skilled workers, which is partially due to an aging, retiring workforce, lack of desire among younger workers to enter the manufacturing field and pandemic situation. Thus, it is essential to deploy robotics and automation which will be helping companies to gain productivity and profitability as well as constantly growing customer demands as well as. There a few industries now days are really crucial who rely on skilled workers for continuing their business such as manufacturing, medical engineering and agriculture. Therefore, recent robotic and automation projects are introduced to provide a solution for these three sectors. The discussion will more emphasis on robotic for rehabilitation and mobile robot for manufacturing, healthcare and plantation.

BRIEF BIOGRAPHY

Wan Zuha Wan Hasan received the degree in Electrical and Electronic Engineering from Universiti Putra Malaysia in 1997. He received the Ph.D. degree in Microelectronic Engineering from the Universiti Kebangsaan Malaysia in 2010. Currently, he is an associate professor at Department of Electrical and Electronic Engineering, Universiti Putra Malaysia and Deputy Dean (Undergraduate Studies), Faculty of Engineering, Universiti Putra Malaysia. He was a postdoctoral research fellow at University of Southampton from December 2011 to November 2012. He is an active leader of Robotic UPM for robotic innovations and competitions. He is a Technical Editor for various International Journals as well as a reviewer of various submitted journal and conference proceeding publication. He has been a keynote speaker and Session Chair of national and international. His research interests include Sensor Technology for Medical Application and Robotic & Automation. Currently, his research projects more on Foot Plantar Pressure Sensor for Diabetic Patient, Robotic Hand Glove, Home Service Robot and Autonomous Robot. Associate Professor Dr Wan Zuha is also involved in Solar technology and Energy system