Scientific Program

World Congress on

Industrial Automation
San Francisco, USA  July 20-22, 2015

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Day 1                July 20, 2015

08:30-09:30   Registrations

Tiburon

09:30-09:55   Opening Ceremony

Keynote Forum

09:55-10:00   Introduction
10:00-10:40   Charlie Duncheon
Grabit Inc., USA

Group Photo

Track 1: Automation Technologies
Track 3: Control and Mechatronic Systems

Chair : Juan R Pimentel, Kettering University, USA
Co-Chair : Cameron Gieda, Sick Inc., USA

Session Introduction

11:00-11:30   Context aware systems for unstructured environments based on WSNs
Juan R Pimentel, Kettering University, USA

Industrial automation technologies and the realization of factory 4.0
Cameron Gieda, Sick Inc., USA

12:00-12:30   BTSS – BUYUKSAHIN tactile sensing system
Utku Buyuksahin, Sensobright Industries LLC, USA

Lunch Break 12:30-13:30 @ Sierra A

13:30-14:00   Automating farms irrigation in Saudi Arabia
Sami A Alhasan, The Excellency Center of Water Technologies, Saudi Arabia

14:00-14:45   Intelligent Vacuum Technology in Automation
Walter Dunkmann, J. Schmalz GmbH., Germany

14:45-15:15   Reaching Ultimate Flexibility for Robot Grippers
Charlie Duncheon, Grabit Inc., USA

15:15-15:45   Static and dynamic obstacle avoidance behaviour for powered wheelchair control system
Jaya Bhanu Rao Degala Ramalu, Newcastle University, UK

15:45-16:15   Use of data analysis and TCAD simulations to understand the characteristics and reliability of high voltage MOS transistors
Jone F Chen, National Cheng Kung University, Taiwan

Panel Discussion

Coffee Break 16:15-16:35 @ Sierra A

Day 2                July 21, 2015

Tiburon

Keynote Forum

08:55-09:00   Introduction
09:00-09:40   Jeffrey Berkley
Mimic Technologies Inc., USA

09:40-10:20   Eduard Babulak
Maharishi University of Management, USA
Coffee Break 10:20-10:40 @ Sierra A

Session Introduction

10:40-11:10
Robotics and automation in space systems: Utilization of infrared laser to improve communication in space systems review
Tariq H. Tashtoush, Texas A&M International University (TAMIU), USA

11:10-11:40
3D Simulation of Human-like Walking and Stability Analysis for Bipedal Robot with Distributed Sole Force Sensors
Eric H.K. Fung, The Hong Kong Polytechnic University, China

11:40-12:10
Simulation in robotic surgery: The challenges and opportunities
Jeffrey Berkley, Mimic Technologies Inc., USA

Workshop on Selection Process of Industrial Robots
Tariq H. Tashtoush, Texas A&M International University (TAMIU), USA

Lunch Break 13:00-14:00 @ Sierra A

Track 5: Automation in manufacturing
Chair: Mehran Mehrandezh, University of Regina, Canada
Co-Chair: Andreas Jonsson, Volvo Car Group, Sweden

Session Introduction

14:00-14:30
Design and development of automated robotic systems for inspecting pipes
Mehran Mehrandezh, University of Regina, Canada

14:30-15:00
Ready for reality; virtual commissioning at Volvo cars
Andreas Jonsson, Volvo Car Group, Sweden

15:00-15:30
Automation in the SME manufacturing learning factories: Case point Norway
Rhythm Suren Wadhwa, Høgskolen Gjøvik University College, Norway

15:30-16:00
Utilizing Factory Modeling and Simulation and the Current Challenges
Tariq H. Tashtoush, Texas A&M International University (TAMIU), USA

Panel Discussion

Coffee Break 16:00-16:20 @ Sierra A

16:20-17:00
Poster Presentations @ Sierra A

Day 3 July 22, 2015

Tiburon

Track 6: Information technologies for automation systems
Chair: Dev Bhattacharya, Moog Crossbow, USA
Co-Chair: Juan R Pimentel, Kettering University, USA

Session Introduction

10:30-11:00
Internet of Things (IoT) applications covering industrial domain
Dev Bhattacharya, Moog Crossbow, USA

11:00-11:30
IT and operations, how and where to get along
Kevin Davenport, Cisco Systems, Inc., USA

11:30-12:00
Lessons learned in fielding driverless (autonomous) vehicles in industrial applications like mining, material handling, and agriculture
Mel Torrie, Autonomous Solutions, USA

Panel Discussion

Lunch Break 12:00-13:00 @ Sierra A
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**May 19-21, 2016  San Antonio, USA**