

## Best Paper Awards

The following papers have been short-listed for the "Best Paper Award". The winner will be announced during the Conference Banquet.

**Paper ID: P131 [WP1-B-2 : (Page 6)]**

### GENERALIZED TAYLOR SERIES EXPANSION FOR CONTOUR ERROR COMPENSATION

Feng Huo<sup>a</sup> and Aun-Neow Poo<sup>b</sup>

*Department of Mechanical Engineering, National University of Singapore,  
10 Kent Ridge Crescent, Singapore.*

*E-mail: <sup>a</sup>huofeng@nus.edu.sg, <sup>b</sup>mpepooan@nus.edu.sg,*

**Paper ID: P235 [WP2-B-4 : (Page 12)]**

### MISALIGNMENT-ROBUST FACIAL EXPRESSION RECOGNITION

Haibin Yan<sup>a</sup>, Marcelo H. Ang<sup>b</sup> and Aun Neow Poo<sup>c</sup>

*Department of Mechanical Engineering, National University of Singapore, 9 Engineering Drive 1, Singapore  
117576. E-mail: <sup>a</sup>g0800270@nus.edu.sg, <sup>b</sup>mpeangh@nus.edu.sg, <sup>c</sup>engpooan@nus.edu.sg*

**Paper ID: P254 [WP1-B-5 : (Page 8)]**

### WAREHOUSE INVENTORY AUTOMATION USING AN RFID SCANNER ROBOT

Yongtae Do<sup>a</sup> and Minhyuk Son<sup>b</sup>

*School of Electronic Engineering, Daegu University Gyeongsan-City, Gyeongbuk, 712-714, South Korea.*

*E-mail: <sup>a</sup>ytdo@daegu.ac.kr, <sup>b</sup>sonminhyuk@paran.com*

**Paper ID: P158 [WP1-A-3 : (Page 4)]**

### NEURAL NETWORKS BASED SYSTEM IDENTIFICATION FOR AN UNMANNED HELICOPTER SYSTEM

Syariful Syafiq Shamsudin<sup>1</sup>, Xiaoqi Chen<sup>2,a</sup>, Wenhui Wang<sup>2,b</sup>, Christopher E. Hann<sup>2,c</sup> and Geoffrey Chase<sup>2,d</sup>

<sup>1</sup>*Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia. E-mail: syariful.shamsudin@pg.canterbury.ac.nz*

<sup>2</sup>*Mechanical Engineering Department, University of Canterbury, Christchurch 8041, New Zealand.*

*E-mail: <sup>a</sup>xiaoqi.chen@canterbury.ac.nz, <sup>b</sup>wenhui.wang@canterbury.ac.nz, <sup>c</sup>chris.hann@canterbury.ac.nz,*

*<sup>d</sup>geoff.chase@canterbury.ac.nz*

**Paper ID: P165 [WP1-B-1 : (Page 6)]**

### INTERNATIONAL MECHATRONICS EDUCATION USING E-LARNING SYSTEM

S. Hata

*Kagawa University, 7717-70, Hayashi-cho, Takamatsu, 761-0396, Japan*

Paper ID: P098 [WP2-A-1 : (Page 9)]

**A CAUTION COGNITION FOR DRIVING CONTROL IN STEER-BY-WIRE BASED  
TRACTOR-TRAILER VEHICLE SYSTEM**

Yuki Katayama<sup>a</sup> and Toshiyuki Murakami<sup>b</sup>

*Department of System Design Engineering, Keio University, 3-14-1 Hiyoshi, Kohoku, Yokohama 223-8522,  
Japan. E-mail: <sup>a</sup>katayama@sum.sd.keio.ac.jp, <sup>b</sup>mura@sd.keio.ac.jp*

Paper ID: P202 [TA1-A-1 : (Page 13)]

**THREE DIMENSIONAL ATTITUDE CONTROL OF AN UNDERACTUATED SATELLITE WITH  
THRUSTERS**

Yasuhiro Yoshimura<sup>1,a</sup>, Takashi Matsuno<sup>1,b</sup> and Shinji Hokamoto<sup>2</sup>

<sup>1</sup>*Department of Aeronautics and Astronautics, Graduate course of Kyushu University, 744 Motooka, Nishi-ku,  
Fukuoka, Japan. E-mail: <sup>a</sup>y-yas@aero.kyushu-u.ac.jp, <sup>b</sup>chu@aero.kyushu-u.ac.jp*

<sup>2</sup>*Department of Aeronautics and Astronautics, Kyushu University, Fukuoka, Japan.  
E-mail: hokamoto@aero.kyushu-u.ac.jp*

Paper ID: P134 [WP1-B-3 : (Page 7)]

**OBSTACLE AVOIDANCE AND PATH PLANNING USING COLOR INFORMATION FOR A BIPED  
ROBOT EQUIPPED WITH A STEREO CAMERA SYSTEM**

Masaaki Kitaoka<sup>a</sup>, Atsushi Yamashita<sup>b</sup> and Toru Kaneko<sup>c</sup>

*Department of Mechanical Engineering, Shizuoka University, Shizuoka, Japan.  
E-mail: <sup>a</sup>f0930025@ipc.shizuoka.ac.jp, <sup>b</sup>tayamas@ipc.shizuoka.ac.jp, <sup>c</sup>tmtkane@ipc.shizuoka.ac.jp*