## Technical Program for Sunday December 15, 2013

### SA1-I

**Control Technology (1) (Regular Session)**  
Room I (501)

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<td>10:00-10:20</td>
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<td><em>Estimation of Systems with Multiple Sliding Surfaces</em>, pp. 1-6.</td>
<td>Srang, Sarot; Yamakita, Masaki</td>
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<td>10:20-10:40</td>
<td>SA1-I.2</td>
<td><em>Fluid Behavior Control on Die Casting Process by Optimization of Plunger Tip Shape Based on Practicable Damage Estimation Algorithm</em>, pp. 7-12.</td>
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<td>11:00-11:20</td>
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<td><em>Trajectory Control of Simple-Structured Flexible Mechanism Using Flexible Pneumatic Cylinders</em>, pp. 19-24.</td>
<td>Mohd, Aliff; Dohta, Shujiro; Akagi, Tetsuya</td>
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**OS1Autonomous Mobile Robot (1) (Invited Session)**  
Room J (502)

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**Human Modeling (1) (Regular Session)**

**Chair:** Ogawa, Kenichiro  
**Tokyo Inst. of Tech.**

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| 10:00-10:20   | SA1-K.1       | Recognizing Human Actions Using Histogram of Local Binary Patterns   | Ahsan, Sk Md Masudul  
Tan, Joo Kooi  
Kim, Hyoungseop  
Ishikawa, Seiji  
Kyushu Inst. of Tech.                                         |
| 10:20-10:40   | SA1-K.2       | Contribution of Lower Extremity Joint Moment on Ground Reaction Force During Walking in Elderly and Younger People | Toda, Haruki  
Nagano, Akinori  
Luo, Zhiwei  
Kobe Univ.                                                   |
| 10:40-11:00   | SA1-K.3       | Visual Motion Information Influences Audiovisual Simultaneity        | Kwon, Jinhwan  
Ogawa, Kenichiro  
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Kim, JongHwan  
Miyake, Yoshihiro  
Tokyo Inst. of Tech.                                         |
| 11:00-11:20   | SA1-K.4       | Head Motion Synchronization in the Process of Consensus Building     | Inoue, Yuki  
Ono, Eisuke  
Kwon, Jinhwan  
Motohashi, Masanari  
Ikari, Daisuke  
Ogawa, Kenichiro  
Tokyo Inst. of Tech.                                         |
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- **Sato, Jumpei**
  - Hiroshima Univ.
- **Takemura, Kazuhiro**
  - Mazda Motor Corp.
- **Yamada, Naoki**
  - Mazda Motor Corp.
- **Kishi, Atsuhide**
  - Mazda Motor Corp.
- **Nishikawa, Kazuo**
  - Mazda Motor Corp.
- **Nouzawa, Takahide**
  - Mazda Motor Corp.
- **Tsuki, Toshio**
  - Hiroshima Univ.
- **Kurita, Yuichi**
  - Hiroshima Univ.

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**OS2: Language, Audio and Speech Processing for Affective Computing (1) (Invited Session)**

Chair: Takiguchi, Tetsuya
- **Kobe Univ.**

#### SA1-L.1

**Facial Expression Recognition Based on Multi-Scale Vector Triangle (I)**, pp. 82-87.

- **Jiang, He**
  - Hefei Univ. of Tech.
- **Hu, Min**
  - Hefei Univ. of Tech.
- **Chen, Hongbo**
  - Hefei Univ. of Tech.
- **Li, Kun**
  - Hefei Univ. of Tech.
- **Wang, Xiaohua**
  - Hefei Univ. of Tech.
- **Ren, Fuji**
  - Univ. of Tokushima

#### SA1-L.2

**Facial Expression Recognition Algorithm Based on Feature Fusion Adaptive Weighted HLAC (I)**, pp. 88-93.

- **Li, Rui**
  - Hefei Univ. of Tech.
- **Yu, Zhuguo**
  - Hefei Univ. of Tech.
- **Hu, Min**
  - Hefei Univ. of Tech.
- **Huang, Zhong**
  - Hefei Univ. of Tech.
- **Ren, Fuji**
  - Univ. of Tokushima

#### SA1-L.3

**Facial Expression Recognition Based on Active Appearance Model & Scale-Invariant Feature Transform (I)**, pp. 94-99.

- **Huang, Zhong**
  - Hefei Univ. of Tech.
- **Ren, Fuji**
  - Univ. of Tokushima

#### SA1-L.4

**Combine Sentiment Lexicon and Dependency Parsing for Sentiment Classification (I)**, pp. 100-104.

- **Quan, Changqin**
  - HeFei Univ. of Tech.
- **Wei, Xiquan**
  - HeFei Univ. of Tech.
- **Ren, Fuji**
  - Univ. of Tokushima

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**Recognition (1) (Regular Session)**

Chair: Aiyama, Yasumichi
- **Univ. of Tsukuba**

Co-Chair: David, Kanny
- **Univ. of Santo Tomas Krizzy**

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**On-Line Collision Avoidance between Two Robot Manipulators Using Collision Map and Simple Escaping**
Simple Obstacle Avoidance for a Mobile Robot Moving through Via Points, pp. 111-114.
Subandi, Tresna Dewi Toyohashi Univ. of Tech.
Uchiyama, Naoki Toyohashi Univ. of Tech.
Sano, Shigenori Toyohashi Univ. of Tech.

Obstacle Detection by the Kinect Cane System for the Visually Impaired, pp. 115-118.
Orita, Kazunori Univ. of Tsukuba
Takizawa, Hotaka Univ. of Tsukuba
Aoyagi, Mayumi Univ. of Tsukuba
Ezaki, Nobuo Toba National Coll. of Maritime Tech.
Mizuno, Shinji Aichi Inst. of Tech.

Kita, Nobuyuki National Inst. of AdvancedIndustrialScienceandTechnology
Kanehiro, Fumio National Inst. of AIST
Morisawa, Mitsuharu National Inst. of AIST
Kaneko, Kenji National Inst. of AIST

David, Kanny Krizzy Univ. of Santo Tomas
Vicerra, Ryan Rhay De La Salle Univ.
Bandala, Argel De La Salle Univ.
Gan Lim, Laurence A De La Salle Univ.
Dadios, Elmer P De La Salle Univ.

Robust Optimal Control of Flexible Space Structures by a Proper Controller Using Displacement Output, pp. 132-137.
Kobayashi, Yohji Kobe City Coll. of Tech.

Design and Control of a Long-Stroke Nano-Positioning Stage, pp. 138-143.
Wu, Ru-Chang National Taiwan Univ.
Tsai, I-Haur National Taiwan Normal Univ.
Wang, Fu-Cheng National Taiwan Univ.
Yen, Jia Yush National Taiwan Univ.

Control and Power Management of a Hybrid Stationary Fuel Cell System, pp. 144-149.
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kuo, Po-Cheng National Taiwan Univ.
A Study on the Reduction of Synchronization Error Using a Relay of Predictive Control Information in Wireless Control of Multiple Plants, pp. 150-154.


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### SP1-L

**Room L (504)**

#### OS2 Language, Audio and Speech Processing for Affective Computing (2) (Invited Session)

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Ren, Fuji  
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HeFei Univ. of Tech.  
HeFei Univ. of Tech.  
Univ. of Tokushima |
Jin, Chao  
Liu, Wei  
Hu, Min  
Xu, Liangfeng  
Ren, Fuji  
Hefei Univ. of Tech.  
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| 14:40-15:00  | SP1-L.3 | Microblogging Hot Events Emotion Analysis Based on RENCECPs (I), pp. 233-238. | Liu, Ning  
Ren, Fuji  
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Univ. of Tokushima  
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| 15:00-15:20  | SP1-L.4 | A New Preprocessing Algorithm and Local Binary Pattern Based Facial Expression Recognition (I), pp. 239-244. | Qian, Yao  
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Hefei Univ. of Tech.  
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The Univ. of Kitakyushu  
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Ohya, Akihisa  
Univ. of Tsukuba  
ORIENTAL MOTOR Co., Ltd.  
Univ. of Tsukuba |
| 14:40-15:00  | SP1-M.3 | Under-Vehicle Inspection Utilizing a Mobile Robot with a LRF Sensor, pp. 257-262. | Sanngoen, Wanayuth  
Yamada, Taichi  
Ohya, Akihisa  
Univ. of Tsukuba  
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**Locomotion (Regular Session)**

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<td>Tamura, Yusuke</td>
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### MA1-I

**Welfare Systems (2) (Regular Session)**

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<td>10:40-11:00</td>
<td>MA1-I.1</td>
<td>Analysis and Control of the Step Climbing Control of a Wheeled Inverted Pendulum Type Assistant Robot</td>
<td>Canete, Luis, Fukushima Univ.; Takahashi, Takayuki, Fukushima Univ.</td>
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<td>11:00-11:20</td>
<td>MA1-I.2</td>
<td>Assistive Motion Control of Cycling Wheelchair Based on Investigation of Load on User</td>
<td>Kaisumi, Aya, Tohoku Univ.; Hirata, Yasuhisa, Tohoku Univ.; Kosuge, Kazuhiro, Tohoku Univ.</td>
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### MA1-J

**Robot Control and Applications (1) (Regular Session)**

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<td>Design and Simulation of the Piezoelectric Actuator Using Taguchi Method</td>
<td>Chang, Shyang-Jye, National Yunlin Univ. of Science and Tech.; Shen, Sheng Chih, National Cheng Kung Univ.</td>
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<td>MA1-J.2</td>
<td>Design of Underactuated Hand for Caging-Based Grasping of Free-Flying Object</td>
<td>Hirano, Daichi, Tohoku Univ.; Nagaoka, Kenji, Tohoku Univ.; Yoshida, Kazuya, Tohoku Univ.</td>
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<td>11:20-11:40</td>
<td>MA1-J.3</td>
<td>Design of an Industrial Robotic Gripper for Precise Twisting and Positioning in High-Speed Assembly</td>
<td>Cannella, Ferdinando, Istituto Italiano di Tecnologia; Chen, Fei, ISTITUTO ITALIANO DI TECNOLOGIA; Canali, Carlo, Department of Advanced Robotics, Istituto Italiano di Tecnologia; Caldwell, Darwin G., Istituto Italiano di Tecnologia</td>
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Tamura, Kimimasa  Keio Univ.
Aoki, Yoshimitsu  Keio Univ.

11:00-11:20 MA1-K.2

Determining Surface Shape of Translucent Objects by Using Laser Rangefinder (I), pp. 454-459.

Ohtani, Kozo  Hiroshima Inst. of Tech.
Baba, Mitsuru  Ibaraki Univ.
Li, Li  Wuhan Textile Univ.

11:20-11:40 MA1-K.3


Kimachi, Akira  Osaka Electro-Communication Univ.
Doi, Motonori  Osaka Electro-Communication Univ.
Nishi, Shogo  Osaka Electro-Communication Univ.

11:40-12:00 MA1-K.4

Community Detection in Real Communication Using Body Sway and Voice Information with Ambient Sensing Chair (I), pp. 466-471.

Wataya, Ryo  Osaka Univ.
Iwai, Daisuke  Osaka Univ.
Sato, Kosuke  Osaka Univ.

MA1-L  Room L (504)
OS5Computational Intelligence for System Analysis and Modeling (Invited Session)

Chair: Chen, Yen-Wei  Ritsumeikan Univ.

10:40-11:00 MA1-L.1


Sakakibara, Kazutoshi  Toyama Prefectural Univ.

11:00-11:20 MA1-L.2

A Study on Tactile Texture Recognition Using Magnetic Type Tactile Sensor (I), pp. 477-481.

Matsumoto, Takuya  Hyogo Prefectural Inst. of Tech.
NAKAMOTO, Hiroyuki  Kobe Univ.

11:20-11:40 MA1-L.3

Food Recognition Using Codebook-Based Model with Sparse-Coding (I), pp. 482-485.

Wazumi, Minami  Ritsumeikan Univ.
Han, Xianhua  Ritsumeikan Univ.
Chen, Yen-Wei  Ritsumeikan Univ.

11:40-12:00 MA1-L.4

Global and Local Features for Accurate Impression Estimation of Cloth Fabric Images (I), pp. 486-489.

Huang, Xinyin  Soochow Univ.
Chen, Dingye  Ritsumeikan Univ.
MA1-M

**Voice Applications** (Regular Session)

Chair: Nitta, Kouichi  
Kobe Univ.

Co-Chair: Togashi, Yuichi  
Kobe Univ.

10:40-11:00  
MA1-M.1


Kakihara, Yasuhiro  
Kobe Univ.

Takiguchi, Tetsuya  
Kobe Univ.

Ariki, Yasuo  
Kobe Univ.

Nakai, Yasushi  
Kawasaki Coll. of Allied Health Professions

Takada, Satoshi  
Kobe Univ.

11:00-11:20  
MA1-M.2

*Voice Conversion Based on Non-Negative Matrix Factorization in Noisy Environments*, pp. 495-498.

Fujii, Takao  
Kobe Univ.

Aihara, Ryo  
Kobe Univ.

Takashima, Ryoichi  
Kobe Univ.

Takiguchi, Tetsuya  
Kobe Univ.

Ariki, Yasuo  
Kobe Univ.

11:20-11:40  
MA1-M.3


Tsujita, Katsuyoshi  
Osaka Inst. of Tech.

Miyaji, Kousuke  
Osaka Inst. of Tech.

MP1-I

**Welfare Systems (3)** (Regular Session)

Chair: Zheng, Xin-Zhi  
ASTEM RI

Co-Chair: Kobayashi, Futoshi  
Kobe Univ.

14:00-14:20  
MP1-I.1

*Clinical Tests on Bioinstrumentation Using Shape Deformation of Amputated Upper Limb*, pp. 505-510.

Mori, Takahiko  
Gifu National Coll. of Tech.

Tanaka, Yuya  
Gifu National Coll. of Tech.

Mito, Misaki  
Gifu National Coll. of Tech.

14:20-14:40  
MP1-I.2


Nishida, Kazuki  
Kobe Univ.

Luo, Zhi-Wei  
Kobe Univ.

Nagano, Akinori  
Kobe Univ.

14:40-15:00  
MP1-I.3

*Cervical Spine Simulation Model for Traction Therapy Analysis*, pp. 516-520.

Wong, Lawrence KF  
Kobe Univ.

Luo, Zhi-Wei  
Kobe Univ.

Kurusu, Nobuyuki  
Kobe Factory of MINATO MEDICAL SCIENCE CO., LTD
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<td>Aiyama, Yasumichi, Univ. of Tsukuba</td>
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<td>Kato, Yoshiko, Kobe Univ.</td>
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Kobe Univ.

Kawahara, Yasuhiro
The Open Univ. of Japan

Luo, Zhi-Wei
Kobe Univ.

Manufacturing and Software Development (Regular Session)
Chair: Fujii, Nobutada
Kobe Univ.
Co-Chair: Ansaloni, Matteo
Univ. degli Studi di Modena e Reggio Emilia


Wielsch, Max
Saxonia Systems AG

Bieniek, Raik
Saxonia Systems AG

Grams, Bernd
Saxonia Systems AG

Lässig, Jörg
Univ. of Applied Sciences Zittau/Görlitz

Equalization Control of Machining Surface by Cutting Depth Estimation Using Machining Support System, pp. 574-579.

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Mie Univ.

Sakamoto, Ryota
Mie Univ. Hospital

Yano, Ken'ichi
Mie Univ.

Fofana, Mustapha. S
Worcester Pol. Inst.

Integration of CAM Off-Line Programming in Robot High-Accuracy Machining, pp. 580-585.

Leali, Francesco
Univ. of Modena and Reggio Emilia

Pini, Fabio
Univ. of Modena and Reggio Emilia

Ansaloni, Matteo
Univ. degli Studi di Modena e Reggio Emilia

OS7 Digital Holography for Sensing Applications (Invited Session)
Chair: Yokota, Masayuki
Shimane Univ.


Watanabe, Kaho
Wakayama Univ.

Nomura, Takanori
Wakayama Univ.

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Kyoto Inst. of Tech.

Ito, Yasunori
Kyoto Inst. of Tech.

Tahara, Tatsuki
Kyoto Inst. of Tech.


Inoue, Junichi  
Xia, Peng  
Awatsuji, Yasuhiro  
Nishio, Kenzo  
Ura, Shogo  
Matoba, Osamu  

Kyoto Inst. of Tech.  
Kyoto Inst. of Tech.  
Kyoto Inst. of Tech.  
Kyoto Inst. of Tech.  
Kyoto Inst. of Tech.  
Kobe Univ.  

14:40-15:00  
MP1-M.3  


Nomura, Keisuke  
Yokota, Masayuki  

Shimane Univ.  
Shimane Univ.  

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Awatsuji, Yasuhiro  
Okuda, Tatsuya  
Itoh, Seiya  
Ura, Shogo  
Nishio, Kenzo  
Kubota, Toshihiro  

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Kyoto Inst. of Tech.  
Kyoto Inst. of Tech.  
Kyoto Inst. of Tech.  
Kyoto Inst. of Tech.  
Kubota Holography Lab. Corp.  

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MP2-I Room I (501)  

OS6 Control and Applications of Intelligent Systems (Invited Session)  
Chair: Shieh, Ming-Yuan Southern Taiwan Univ. of Science and Tech.  

15:40-16:00  
MP2-I.1  


Chiang, Kuo-Hsiang  
Chen, Shih-Chung  
Wu, Chung-Min  
Luo, Ching-Hsing  

Company  
Southern Taiwan Univ. of Science and Tech.  
Kun-Shan Univ.  
Univ.  

16:00-16:20  
MP2-I.2  


Shieh, Ming-Yuan  
Chiou, Juing-Shian  
Li, Jeng-Han  
Pai, Neng-Sheng  
Chen, Yen-Hao  

Southern Taiwan Univ. of Science and Tech.  
Southern Taiwan Univ. of Science and Tech.  
National Chin-Yi Univ. of Tech.  
Southern Taiwan Univ. of Science and Tech.  

16:20-16:40  
MP2-I.3  


Wu, Chung-Min  
Chen, Shih-Chung  

Kun-Shan Univ.  
Southern Taiwan Univ. of Science and Tech.  

16:40-17:00  
MP2-I.4  

Control of a Feeding Robot (I), pp. 624-628.  

Wang, Ming-Shyan  

Southern Taiwan Univ. of Science and Tech.  

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<td>On Energy-Based Robust Passive Control of a Robot Manipulator, pp. 635-640.</td>
<td>Cao, Sheng, Luo, Zhi-Wei, Kobe Univ.</td>
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Yamaguchi, Yuki Kyoto Univ.
Noda, Kuniaki Waseda Univ.
Nishide, Shun Kyoto Univ.
Okuno, Hiroshi G. Kyoto Univ.
Ogata, Tetsuya Waseda Univ.

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Sakurai, Ryuhei Ritsumeikan Univ.
Lee, Joo-Ho Ritsumeikan Univ.

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Chair: Matoba, Osamu Kobe Univ.

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Dobrowolski, Przemysław Warsaw Univ. of Tech.

16:00-16:20 MP2-M.2
Lin, Chien-Chou Dept. of Computer Science and Information Engineering, National Yu
Liao, Yan-Deng National Yunlin Univ. of Science & Tech. Department o
Luo, Wun-Jhih National Yunlin Univ. of Science & Tech. Department o

16:20-16:40 MP2-M.3
Akai, Naoki Utsunomiya Univ.
Hoshino, Satoshi Utsunomiya Univ.
Inoue, Kazumichi Utsunomiya Univ.
Ozaki, Koichi Utsunomiya Univ.

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Hashimoto, Hideki Chuo Univ.
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Chienkuo Tech. Univ.

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Chienkuo Tech. Univ.

Lin, Chen-En  
Chienkuo Tech. Univ. Electrical Engineering

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Liang, Jung-chin  
Ling Tung Univ.

Huang, Shu-Chen  
Asia Univ.

Liang, Jun-Chun  
Tech. Univ. Changhua, Automation Engineering

Nagai, Masatake  
National Taichung Univ. of Education

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Chen, Kate Tzu-ching  
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Chen, Hsin-I  
Chinese Culture Univ.

Chen, Hsiao-Ching  
Chien-Kuo Tech. Univ.

Huang, Cheng-Shen  
Tainan Univ. of Tech.


Shen, Sheng Chih  
National Cheng Kung Univ.

Chang, Shyang-Jye  
National Yunlin Univ. of Science and Tech.

Spatio-Temporal Bird’s-Eye View Images Using Multiple Fish-Eye Cameras, pp. 753-758.

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Moro, Alessandro  
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Sugahara, Atsushi  
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Toshiba Corp.

Yamashita, Atsushi  
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Asama, Hajime  
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Yaguchi, Hiroaki  
The Univ. of Tokyo

Takaoka, Yutaka  
Toyota Motor Corp.

Yamamoto, Takashi  
Toyota Motor Corp.

Inaba, Masayuki  
The Univ. of Tokyo

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Chui, Chee Kong National Univ. of Singapore
Teo, Chee Leong National Univ. of Singapore
Lau, David Pang Cheng Raffles Hospital

11:20-11:40 TA2-I.2
Design of a 4-DOF Forceps Manipulator for Robotic Surgery, pp. 778-783.
Kanno, Takahiro Tokyo Medical and Dental Univ.
Haraguchi, Daisuke Tokyo Inst. of Tech.
Tadano, Kotaro Tokyo Inst. of Tech.
Kawashima, Kenji Tokyo Medical and Dental Univ.

11:40-12:00 TA2-I.3
Assistive Surgical Manipulator for Cochlear Implant Surgery, pp. 784-789.
Mendis, Arjuna Univ. of Moratuwa
Dedduwa Pathiranage, Chandima Univ. of Moratuwa
Yasawardena, ADKSN Lady Ridgeway Hospital

TA2-J
Room J (502)
OS8Swarm Robotics (2) (Invited Session)

Chair: Naruse, Keitaro Univ. of Aizu

11:00-11:20 TA2-J.1
Yasuda, Toshiyuki Hiroshima Univ.
Ohkura, Kazuhiro Hiroshima Univ.
Wada, Nanami Hiroshima Univ.
Matsumura, Yoshiyuki Shinshu Univ.

11:20-11:40 TA2-J.2
Swarm EKF Localization for a Multiple Robot System with Range-Only Measurements (I), pp. 796-801.
Naruse, Keitaro Univ. of Aizu

11:40-12:00 TA2-J.3
A $(\mu, \Lambda)$ Evolutionary and Particle Swarm Hybrid Algorithm Over Cloud Computing, with an Application to Dinosaur Gait Optimization (I), pp. 802-807.
Matsumura, Yoshiyuki Shinshu Univ.
Sugiyama, Kiyotaka Shinshu Univ.
Yasuda, Toshiyuki Hiroshima Univ.
Ohkura, Kazuhiro Hiroshima Univ.

12:00-12:20 TA2-J.4
Lévy Walk Enhances Efficiency of Group Foraging in Pheromone-Communicating Swarm Robots (I), pp. 808-813.
### TA2-K

**Human Interface (2) (Regular Session)**

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<td>Fujisawa, Ryusuke, Hachinohe Inst. of Tech.</td>
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<td>Dobata, Shigeto, Univ. of Lausanne</td>
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<td>Hamamatsu, Keita, Univ. of Tsukuba</td>
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<td>Hoshino, Kiyoshi, Univ. of Tsukuba</td>
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<tr>
<td>11:20-11:40</td>
<td>TA2-K.2</td>
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<td>Fujimoto, Kouhei, Kobe Univ.</td>
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<td>Kobayashi, Futoshi, Kobe Univ.</td>
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<td>Nakamoto, Hiroyuki, Kobe Univ.</td>
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<td>Kojima, Fumio, Kobe Univ.</td>
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<td>11:40-12:00</td>
<td>TA2-K.3</td>
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<td><strong>A Simple Pen-Type Device Based Interaction for the Low Cost Calculation Power</strong>, pp. 826-831.</td>
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<td>Iwamoto, Kenji, Ritsumeikan Univ.</td>
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<td>Lee, Joo-Ho, Ritsumeikan Univ.</td>
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### TA2-L

**OS9Grey System Theory and Its Applications (2) (Invited Session)**

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<th>Time</th>
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<td><strong>Applying GM(0, N) in the Ranking of Aromatherapy by Using Heart Chakra Essential Oils (I)</strong>, pp. 832-837.</td>
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<td>Lee, Ya-Ting, National Taichung Univ. of Science and Tech.</td>
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<td>Hwang, Chi-Fang, National Taichung Univ. of Science and Tech.</td>
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<td>Chen, Mei-Hui, Chienkuo Tech. Univ.</td>
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<td>Luo, Ju-Zhen, Chien Kuo Tech. Univ.</td>
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<td>Chen, Hsin-I, Chinese Culture Univ.</td>
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<td>11:20-11:40</td>
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<td>Wang, Jee-Ray, ChienKuo Tech. Univ.</td>
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<td>Tsai, Yu-Lung, ChienKuo Tech. Univ.</td>
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<td>Wu, Li-Nuo, ChienKuo Tech. Univ.</td>
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<td>Lin, Yu-Cheng, ChienKuo Tech. Univ.</td>
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<td>11:40-12:00</td>
<td>TA2-L.3</td>
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<td><strong>Apply Grey Entropy to Analyze the Weighting of Influence Factor in Sexual Harassment on Campus in Taiwan (I)</strong>, pp. 844-849.</td>
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<td>Wei, mei-chuan, Chienkuo Tech. Univ.</td>
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<td>Fang, Wen-Hui, <a href="mailto:whfang@cc.ctu.edu.tw">whfang@cc.ctu.edu.tw</a></td>
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<td>Chen, Show-Feng, Chang Jung Christian Univ.</td>
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<td>Hsiao, Yang-Fang, Chienkuo Tech. Univ.</td>
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TP1-I  Room I (501)
Rescue and Communication Systems (Regular Session)

Chair: Watanabe, Tomio  Okayama Prefectural Univ.
14:00-14:20  TP1-I.1

Development of Crawler Type Rescue Robot with 2 DOF Flipper Arms, pp. 850-854.
Sato, Noritaka  Nagoya Inst. of Tech.
Torii, Katsuma  Nagoya Inst. of Tech.
Morita, Yoshifumi  Nagoya Inst. of Tech.
14:20-14:40  TP1-I.2

Kamezaki, Mitsuhiro  Waseda Univ.
Aguirre Dominguez, Gonzalo  Waseda Univ. Sugano Lab.
Yang, Junjie  Waseda Univ.
Iwata, Hiroyasu  Waseda Univ.
Sugano, Shigeki  Waseda Univ.
14:40-15:00  TP1-I.3

Okabe, Daisuke  Nagoya Inst. of Tech.
Morita, Yoshifumi  Nagoya Inst. of Tech.
Sato, Noritaka  Nagoya Inst. of Tech.
15:00-15:20  TP1-I.4

A Note on Adaptive Coding Scheme for Minimizing Tracking Error in Wireless Feedback Control Systems, pp. 867-872.
Hattori, Shingo  Nagoya Univ.
Kobayashi, Kentaro  Nagoya Univ.
Okada, Hiraku  Nagoya Univ.
Katayama, Masaaki  Nagoya Univ.
15:20-15:40  TP1-I.5

Video Communication System with Speech-Driven Embodied Entrainment Audience Characters with Partner’s Face, pp. 873-878.
Nakayama, Shiho  Okayama Prefectural Univ.
Watanabe, Tomio  Okayama Prefectural Univ.
Ishii, Yutaka  Okayama Prefectural Univ.
15:40-16:00  TP1-I.6

Laser Beam Tracking System for Active Free-Space Optical Communication, pp. 879-884.
Muta, Shigeki  Saga Univ.
Tsujimura, Takeshi  Saga Univ.
Izumi, Kiyotaka  Saga Univ.

TP1-J  Room J (502)
Swarm Robotics (3) (Regular Session)

Chair: Murayama, Toru  Wakayama National Coll. of Tech.
14:00-14:20  TP1-J.1

Comparison of Two Interval Models for Interval-Valued Particle Swarm Optimization, pp. 885-888.
TP1-J.2


Murayama, Toru  
Wakayama National Coll. of Tech.

14:40-15:00  
TP1-J.3


Sasahara, Kosuke  
Kobe Univ.

Nagano, Akinori  
Kobe Univ.

Luo, Zhiwei  
Kobe Univ.

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**TP1-M**  
Room M (505)

**Vision Systems (2) (Regular Session)**

Chair: Matoba, Osamu  
Kobe Univ.

14:00-14:20  
TP1-M.1


Yamazaki, Kimitoshi  
Shinshu Univ.

Nishino, Tomohiro  
the Univ. of Tokyo

Nagahama, Kotaro  
The Univ. of Tokyo

Okada, Kei  
The Univ. of Tokyo

Inaba, Masayuki  
The Univ. of Tokyo

14:20-14:40  
TP1-M.2


HyungTae, Kim  
KITECH

KyeongYong, Cho  
KAIST

SeungTaek, Kim  
KITECH

Jongseok, Kim  
KITECH

14:40-15:00  
TP1-M.3

**High-Speed Object Tracking across Multiple Networked Cameras**, pp. 913-918.

Noda, Akihito  
The Univ. of Tokyo

Yamakawa, Yuji  
Univ. of Tokyo

Ishikawa, Masatoshi  
Univ. of Tokyo

15:00-15:20  
TP1-M.4


Yoshimura, Akira  
Ritsumeikan Univ.

Lee, Joo-Ho  
Ritsumeikan Univ.