## Technical Program for Tuesday July 7, 2015

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<td>Baek, Woon Kyung</td>
<td>Pukyong National Univ</td>
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<td>Ha, Kyoung Nam</td>
<td>Korea Inst. of Industrial Tech</td>
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<td>13:00-16:45</td>
<td><strong>TuBT1</strong> Recent Advances in Mechatronics for Intelligent Manufacturing (Workshop)</td>
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<td>Lee, Kok-Meng</td>
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<td>14:00-17:30</td>
<td><strong>TuCT2</strong> Rehabilitation and Medical Robotics (Workshop)</td>
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<td>Rehabilitation and Medical Robotics*</td>
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<td>Bae, Joonbum</td>
<td>UNIST</td>
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### Technical Program for Wednesday July 8, 2015

#### WeAT1

**Machine Vision (Regular Session)**

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</table>
| 09:00-09:05 | WeAT1.1       | Hand-Eye Calibration Using Stereo Camera through Pure Rotations - Fitting Circular Arc in 3D Space with Joint Angle Constraint | Li, Jianhua (Tokyo Inst. of Tech)
|            |               |                                                                       | Endo, Gen (Tokyo Inst. of Tech)
|            |               |                                                                       | Fukushima, Edwardo F. (Tokyo Univ. of Tech)                            |

#### WeAT1.2

**Unknown Object Grasping Using Force Balance Exploration on a Partial Point Cloud**

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</table>
| 09:20-09:45 | WeAT1.3       | Pose Estimation and Trajectory Calculation for Autonomous Close-Range Rendezvous and Docking | Priggemeyer, Marc (RWTH-Aachen Univ)
|            |               |                                                                       | Dimartino, Magdalena (Inst. for Man-Machine Interaction, RWTH Aachen Univ) |
|            |               |                                                                       | Rossmann, Juergen (RWTH Aachen Univ)                                   |

#### WeAT1.4

**Detection of Pedestrian Crossing Road Using Action Classification Model**

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</table>
| 10:00-10:20 | WeAT1.5       | An Efficient Approach for Circular Shape Target Recovery              | Haniyono, Joko (Univ. of Ulsan)
|            |               |                                                                       | Jo, Kang-Hyun (Univ. of Ulsan)                                         |

#### WeAT2

**Computational Models and Methods (Regular Session)**

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</table>
| 08:45-09:05 | WeAT2.1       | Valve Dynamics in Multi-Cylinder Positive Displacement Pump Model    | Josifovic, Aleksandar (Univ. of Strathclyde)
|            |               |                                                                       | Cornay, Jonathan (Heriot-Watt Univ)
|            |               |                                                                       | Davies, Bruce (Heriot-Watt Univ)                                       |

#### WeAT2.2

**Residual Correction Method for Fast Calculation of Arctangent in Embedded Systems**

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<th>Time</th>
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</table>
| 09:05-09:20 | WeAT2.2       |                                                                       | Kusaka, Takashi (Hokkaido Univ)
|            |               |                                                                       | Tanaka, Takayuki (Hokkaido Univ)                                       |

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**WeAT3**

**Modeling and Design of Mechatronic Systems I (Regular Session)**

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<th>Time</th>
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<th>Authors</th>
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</table>
| 08:45-09:05 | WeAT3.1       | Design of a General Resilient Robotic System Based on Axiomatic Design Theory | Zhang, Tan (Univ. of Saskatchewan)
|            |               |                                                                       | Zhang, Dan (Univ. of Ontario Inst. of Tech)                            |
|            |               |                                                                       | Gupta, Madan M. (Univ. of Saskatchewan, CA)                             |
|            |               |                                                                       | Zhang, Wenjun (Univ. of Saskatchewan)                                  |

#### WeAT3.2

**Dynamic Modelling of a Hybrid Wind Turbine in Connection with Compressed Air Energy Storage through a Power Split Transmission Device**

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</table>
| 09:25-09:45 | WeAT3.3       | The Pin-Lock Based Moving Mechanism of Wall Climbing Robot for the Reconfigurable Intelligent Space | Krupke, Christopher (Univ. of Warwick)
|            |               |                                                                       | Wang, Jihong (Univ of Warwick)
|            |               |                                                                       | Clarke, Jonathan (Univ of Warwick)                                    |
|            |               |                                                                       | Luo, Xing (The Univ. of Warwick)                                       |

#### WeAT3.4

**Nonlinearly Enhanced Vortex Induced Vibrations for Energy Harvesting**

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<td>09:45-10:05</td>
<td>WeAT3.4</td>
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<td>Huynh, Bao Huy (Nanyang Tech. Univ)</td>
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<td>Tjahjowidodo, Tegoeh (Nanyang Tech. Univ)</td>
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</tbody>
</table>
## Legged Robots (Regular Session)

### Chair: Seo, TaeWon
- Yeungnam Univ

### Co-Chair: Li, Xiaoji
- Inst. of Automation, Chinese Acad. of Science

### 08:45-09:05 WeAT4.1
- Lee, Dong-Jun
  - Ritsumeikan Univ
- Park, Minkee
  - Seoul National Univ. of Science and Tech
- Lee, Joo-Ho
  - Ritsumeikan Univ

### 09:05-09:25 WeAT4.2
- Doan, Nhat Thanh
  - Tokyo Inst. of Tech
- Hayashi, Terumitsu
  - Tokyo Inst. of Tech
- Yamakita, Masaki
  - Tokyo Inst. of Tech

### 09:25-09:45 WeAT4.3
**Gait Design by Graph Coloring for Robots That Have Legs on Their Faces**, pp. 116-120.
- Mikami, Sadayoshi
  - Future Univ. Hakodate
- Fukuda, Tomohisa
  - Future Univ. Hakodate
- Suzuki, Sho’ji
  - Future Univ. Hakodate

### 09:45-10:05 WeAT4.4
**Hexapedal Robot for Amphibious Locomotion on Ground and Water**, pp. 121-126.
- Kim, Hyungyu
  - YeungNam Univ
- Lee, Dong-Gyu
  - Yeunnam Univ
- Liu, Yanheng
  - YeungNam Univ
- Jeong, Kyungmin
  - KAERI
- Seo, TaeWon
  - Yeungnam Univ

### 10:05-10:25 WeAT4.5
- Yun, Dongwon
  - Kimm, Korea
- Fearing, Ronald
  - Univ. of California at Berkeley

## Medical Robotics/Mechatronics (Regular Session)

### Chair: Gao, Wenchao
- National Univ. of Singapore

### Co-Chair: Yu, Yong
- Kagoshima Univ

### 08:45-09:05 WeAT5.1
- Sun, Zhenglong
  - Singapore Univ. of Tech. and Design
- Foong, Shaohui
  - Singapore Univ. of Tech. and Design

## Biomechatronics (Regular Session)

### Chair: Alici, Gursel
- Univ. of Wollongong

### Co-Chair: Sheng, Xinjun
- Shanghai Jiao Tong Univ

### 08:45-09:05 WeAT6.1
- Thompson-Bean, Elliot
  - The Univ. of Auckland
- Steiner, Oliver
  - The Univ. of Auckland
- McDaid, Andrew
  - The Univ. of Auckland

### 09:05-09:25 WeAT6.2
- Nguyen, Hoang-Dung
  - Pusan National Univ
- Hong, Keum-Shik
  - Pusan National Univ

### 09:25-09:45 WeAT6.3
Inertial Sensor Based Inverse Dynamics Analysis of Human Motions, pp. 177-182.
Min, Seojung

Kim, Jung

09:45-10:05
WeAT6.4
D’Imperio, Mariapiaola
Istituto Italiano Di Tecnologia
Carbonari, Luca
Istituto Italiano Di Tecnologia
Rahman, Nahian
Istituto Italiano Di Tecnologia
Canali, Carlo
Department of Advanced Robotics, Istituto Italiano Di Tecnologia
Cannella, Ferdinando
Istituto Italiano Di Tecnologia

10:05-10:25
WeAT6.5
Munoz, Fredy
Univ. of Wollongong
Alici, Gursel
Univ. of Wollongong
Li, Weihua
Univ. of Wollongong

10:25-10:45
WeAT6.6
Towards Zero Training for Myoelectric Control Based on a Wearable Wireless Semg Armband, pp. 196-201.
Guo, Weichao
Shanghai Jiao Tong Univ
Sheng, Xinjun
Shanghai Jiao Tong Univ
Liu, Jianwei
Shanghai Jiao Tong Univ
Hua, Lei
Shanghai Jiao Tong Univ
Zhang, Dingguo
Shanghai Jiao Tong Univ
Zhu, Xiangyang
Shanghai Jiao Tong Univ

WeAT7
Identification and Estimation in Mechatronics (Regular Session)
Chair: Perruquetti, Wilfrid
Ec. Centrale De Lille
Co-Chair: Li, Cong
Zhejiang Univ

08:45-09:05
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Attitude Estimation Using Particle Filter with Monopulse Radars in a Multipath Environment, pp. 202-207.
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Mitsubishi Electric Corp
Kurazume, Ryo
Kyushu Univ
Yasushi, Obata
Mitsubishi Electric Corp

09:05-09:25
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Parameter Estimation of Sandwich Systems with Backlash Via Modified Kalman Filter, pp. 208-213.
Li, Yanyan
Nankai Univ
Tan, Yonghong
Shanghai Normal Univ
Li, Haifen
Nankai Univ
Dong, Ruili
Shanghai Normal Univ

09:25-09:45
WeAT7.3
Dual Drive System Modeling and Analysis for Synchronous Control of an H-Type Gantry, pp. 214-219.
Li, Cong
Zhejiang Univ
Yao, Bin
Purdue Univ
Zhu, Xiaocong
Zhejiang Univ
Wang, Qingfeng
Zhejiang Univ

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Guo, Qi
Ec. Centrale De Lille
Gautier, Maxime
Univ. of Nantes/IRCCyN

Liu, Da-Yan
INSA Centre Val De Loire, Campus De Bourges
Perruquetti, Wilfrid
Ec. Centrale De Lille

10:05-10:25
WeAT7.5
Jubien, Anthony
Univ. De Nantes
Gautier, Maxime
Univ. of Nantes/IRCCyN
Janot, Alexandre
ONERA

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WeAT7.6
Lee, Kok-Meng
Georgia Tech. Univ. of Sci & Tech
Li, Min
Georgia Inst. of Tech
Lin, Chun-Yeon
Georgia Inst. of Tech

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201 & 202
Plenary Session I (Plenary Session)
Chair: Kim, Sungshin
Pusan National Univ

11:30-12:30
WePlenary_Session.1
Robots for Micro-Nanohandling*. Gauthier, Michael
FEMTO-ST Inst

WeBT1
Planning and Navigation (Regular Session)
Chair: Oftadeh, Reza
Tampere Univ. of Tech
Co-Chair: Choi, Joon Young
Pusan National Univ

13:45-14:05
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Dai, Penglei
The Univ. of New South Wales
Katupitiya, Jayantha
The Univ. of New South Wales

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Korea Univ
Song, Jae-Bok
Korea Univ

14:25-14:45
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Southeast Univ
Cheng, Xianghong
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Southeast Univ
Lu, Yuan
HS Marine Company

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Kawabata, Kuniaki
RIKEN
Ma, Liang
Xi’an Jiaotong Univ
Xue, Jianru
Xi’an Jiaotong Univ
Yokota, Sho
Toyo Univ
Mitsukura, Yasue
Graduate School of Bio-Applications and System Engineering
Zheng, Namling
Xi’an Jiaotong Univ

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<td>Chair: Malvezzi, Monica Co-Chair: Yamakawa, Yuji</td>
<td>Univ. of Siena, Univ. of Tokyo</td>
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<td>Human-Robot Cooperative Task Realization Using High-Speed Robot Hand System</td>
<td>Yamakawa, Yuji, Kuno, Kazuki, Ishikawa, Masatoshi</td>
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<td>School of Mechanical and Power Engineering, East China Univ, Northeastern Univ, Univ. of Saskatchewan</td>
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<td>Univ. of Siena, Univ. of Siena, Univ. of Siena, Univ. of Siena</td>
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<td>Analysis of Individual Driving Experience in Autonomous and Human-Driven Vehicles Using a Driving Simulator</td>
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<td>SYSU-CMU Joint Inst. of Engineering, Univ. of Ontario Inst. of Tech</td>
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<td>Playful Home Training for Falls Prevention</td>
<td>Rios, Shannon Andrew Fleming, Andrew J.</td>
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<td>Design of a Two Degree of Freedom Resonant Miniature Robotic Leg</td>
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<td>WeBT3.3</td>
<td>Optimization Design of a Novel Closed-Loop Spray Cooling System</td>
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<td>Beihang Univ, Beihang Univ, Beihang Univ, Beihang Univ, Beihang Univ, Beihang Univ</td>
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<td>Kinematic Analysis and Optimization for 4PUS-RPU Mechanism</td>
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<td>Univ. of Ontario Inst. of Tech</td>
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<td>Chair: Zhang, Yuming Co-Chair: Kim, Euntai</td>
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<td>Welder Rating System Based Learning of Human Welder Intelligence in GTAW</td>
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Pose Estimation and 3D Environment Reconstruction Using Less Reliable Depth Data, pp. 359-364.
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Adaptive Friction Compensation for Hand Grasping and Compliant Control, pp. 365-370.
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Adaptive Sliding Mode Control and Particle Swarm Optimization Torque Ripple Reduction of Switched Reluctance Motor Drive with Adaptive Sliding Mode Control and Particle Swarm Optimization, pp. 371-376.
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Mansouri Boroujeni, Mojtaba
Isfahan Univ. of Tech
Rashidi, Amir
Isfahan Univ. of Tech
Saghaia-nejad, Sayed
Isfahan Univ. of Tech

Ahn, Jin-Woo
Kyungsun Univ

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Kim, Eun Kyeyong
Pusan National Univ
Kim, Sungshin
Pusan National Univ

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Wang, Shaoping
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Li, Qian
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Shi, Jian
Beihang Univ

Wang, Giannan
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Xu, Bing
Zhejiang Univ
Zhang, Junhui
Zhejiang Univ

Li, Hengbo
Beihang Univ
Yang, Liman
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Li, Yunhua
Beihang Univ
Yao, Nan
Beihang Univ
Ye, Yuan
Center International Group Company

Li, Xiao
Beihang Univ
Wu, Shuai
Beihang Univ

Sheng, Zhiqing
Beihang Univ
Li, Yunhua
Beihang Univ

Chung, Sang Hun
Korea Inst. of Science and Tech
Chung, Jong Min
Korea Inst. of Science and Tech
Kim, Seung-Jong
Korea Inst. of Science and Tech. (KIST)
Hwang, Yoha
Korea Inst. of Science and Tech
An, Jinung
DGIST

Lee, Hwi-Young
Korea National Rehabilitation Center
Co-Chair: Cho, Kyu-Jin
Seoul National Univ
Organizer: Bae, Joonbum
UNIST

Lee, Hwi-Young
Korea National Rehabilitation Center
Co-Chair: Cho, Kyu-Jin
Seoul National Univ
Organizer: Bae, Joonbum
UNIST

Kim, Sang-Hun
Seoul National Univ
Cho, Kyu-Jin
Seoul National Univ. Biorobotics Lab
### WeBT7.5

#### Neuro-Feedback Using Real-Time Near Infrared Spectroscopy During Treadmill Walking: A Pilot Study

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<th>Institution</th>
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<tr>
<td>Lee, Seung Hyun</td>
<td>Daegu Gyeongbuk Inst. of Science and Tech</td>
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<td>Jang, Gwang Hee</td>
<td>DGIST</td>
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<tr>
<td>An, Jinung</td>
<td>DGIST</td>
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#### Design and Analysis of a Novel 3D Micromanipulator with Large Range of Motion

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<tr>
<td>Wu, Zhigang</td>
<td>Univ. of Macau</td>
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<tr>
<td>Li, Yangmin</td>
<td>Univ. of Macau/Tianjin Univ. of Tech</td>
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#### Scanning Probe Microscope Trajectory Measurement by Scanning a Single Feature

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<td>Peyton Jones, James</td>
<td>Villanova Univ</td>
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<td>Clayton, Garrett</td>
<td>Villanova Univ</td>
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#### Atomic Force Microscopy Using Voice Coil Actuators for Vibration Isolation

<table>
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<tr>
<td>Ito, Shingo</td>
<td>Vienna Univ. of Tech</td>
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<td>Neyer, Daniel</td>
<td>Vienna Univ. of Tech</td>
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<td>Pirker, Stefan</td>
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<td>Steininger, Juergen</td>
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<td>Schitter, Georg</td>
<td>Vienna Univ. of Tech</td>
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<td>Xi, Kailun</td>
<td>Zhejiang Univ</td>
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<td>Wang, Yancheng</td>
<td>Zhejiang Univ</td>
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<td>Mei, Deqing</td>
<td>Zhejiang Univ</td>
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<td>Liang, Guanhao</td>
<td>Zhejiang Univ</td>
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<td>Chen, Zichen</td>
<td>Zhejiang Univ</td>
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#### WeBT7.6

#### A Flexible Tactile Sensor Array Based on Pressure Conductive Rubber for Three-Axis Force and Slip Detection

<table>
<thead>
<tr>
<th>Author</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Yoon, Jinwook</td>
<td>UNIST</td>
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<tr>
<td>Choi, Hyouk Ryel</td>
<td>Sungkyunkwan Univ</td>
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#### WePosterT1.1

#### Pseudospectral Motion Planning for Autonomous Bicycles

<table>
<thead>
<tr>
<th>Author</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Yuan, Jing</td>
<td>Nankai Univ</td>
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<td>Zhang, Jinhe</td>
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<td>Ding, Song</td>
<td>Nankai Univ</td>
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#### WePosterT1.2

#### Adaptive Trajectory Tracking Control for a Four-Rope Crane

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<tbody>
<tr>
<td>Lu, Biao</td>
<td>Nankai Univ</td>
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<td>Fang, Yongchun</td>
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<td>Sun, Ning</td>
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#### Parameter Estimation of the Lankarani-Nikravesh Contact Force Model Using a New Modified Linear Method

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<tr>
<td>Ma, Jia</td>
<td>Nanjing Univ. of Science and Tech</td>
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<td>Qian, Linfang</td>
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<td>Chen, Guangsong</td>
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#### Gait Transition Based on CPG Modulation for Quadruped Locomotion

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<tr>
<td>Li, Xiaoli</td>
<td>Inst. of Automation, Chinese Acad. of Science</td>
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<tr>
<td>Wang, Wei</td>
<td>Chinese Acad. of Sciences</td>
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<tr>
<td>Yi, Jianqiang</td>
<td>Inst. of Automation, Chinese Acad. of Science</td>
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#### Application of a Robotic System with Mobile Manipulator and Vision Positioning

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<tr>
<td>Shao, Xuesong</td>
<td>Inst. of Automation, Chinese Acad. of Sciences</td>
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<tr>
<td>Xiao, Wei</td>
<td>Inst. of Automation, Chinese Acad. of Sciences</td>
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Seoul National Univ
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Afzal, Muhammad Raheel 
Gyeongsang National Univ

Oh, Min-Kyun 
Gyeongsang National Univ, Hospital

Yoon, Jungwon 
Gyeongsang National Univ

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Brassitos, Elias 
Northeastern Univ

Dubowsky, Steven 
MIT
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Tanaka, Yuto  Ritsumeikan Univ
Kawamura, Akihito  Kyushu Univ
Kawamura, Sadao  Ritsumeikan Univ
Nishioka, Yasutaka  Univ. of Shiga Prefecture

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Hong, Seongil  Agency for Defense Development
Lee, Youngwoo  Agency for Defense Development
Park, Kyu Hyun  Agency for Defense Development
Lee, Won Suk  Agency for Defense Development
Choi, Byunghun  Agency for Defense Development
Sim, Okkee  KAIST
Kim, Inhyeok  Korea Advanced Inst. of Science and Tech
Oh, Jun Ho  Korea Advanced Inst. of Sci. and Tech
Kang, Youn Sik  Agency for Defense Development

**ThAT4  206-2**

**Additive Manufacturing (Organized Session)**

Chair: Wicker, Ryan  The Univ. of Texas at El Paso
Co-Chair: Macdonald, Eric  The Univ. of Texas at El Paso
Organizer: Wicker, Ryan  The Univ. of Texas at El Paso
Organizer: Macdonald, Eric  The Univ. of Texas at El Paso

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Kim, Chi Yen  Univ. of Texas at El Paso
Wicker, Ryan  The Univ. of Texas at El Paso
Macdonald, Eric  The Univ. of Texas at El Paso
Espalin, David  The Univ. of Texas at El Paso
Perez, Mireya A  The Univ. of Texas at El Paso
Cuaron, Alejandro  The Univ. of Texas at El Paso

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Lembono, Teguh Santoso  Nanyang Tech. Univ
Yuan, Qilong  Nanyang Tech. Univ
Zou, Yuhua  Nanyang Tech. Univ
Chen, I-Ming  Nanyang Tech. Univ

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Mutlu, Rahim  Univ. of Wollongong
Alici, Gursel  Univ. of Wollongong
in het Panhuis, Marc  Univ. of Wollongong
Spinks, Geoffrey  Univ. of Wollongong

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Shahriar, Md Rifat  Queensland Univ. of Tech
Borghesani, Pietro  Pol. Di Milano - Department of Mechanical Engineering
Tan, Andy C. C.  Queensland Univ. of Tech

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Caesarendra, Wahyu  Diponegoro Univ
Tono Putri, Farka  Diponegoro Univ
Ariyanto, Mochammad  Diponegoro Univ
Dharma Setiawan, Joga  Diponegoro Univ

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Da Silva, Pablo Josue  Univ. of Brasilia / Inst. Federal De Brasilia
Álvares, Alberto José  Univ. De Brasilia

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**Actuators (Regular Session)**

Chair: Hussein, Hussein  FEMTO-ST
Co-Chair: Abdul Nasir, Abd Ghafar  Okayama Univ. of Science and Tech

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Krupke, Christopher  Univ. of Warwick
Wang, Jihong  Univ. of Warwick

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Grivon, Daniel  École Pol. Fédérale De Lausanne (EPFL)
Civet, Yoan  EPFL

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Coşkun, Mustafa Yavuz  Karadeniz Tech. Univ
İltik, Mehmet  Karadeniz Tech. Univ

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Abdul Nasir, Abd Ghafar  Okayama Univ. of Science and Tech
Akagi, Tetsuya  Okayama Univ. of Science and Tech
Dohta, Shujiro  Okayama Univ. of Science and Tech
Ono, Ayumu  Okayama Univ. of Science and Tech

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Hussein, Hussein  Femto-St
Le moal, Patrice  Femto-St
Bourbon, Gilles  Femto-St
Haddab, Yassine  FEMTO-ST
Lutz, Philippe  Femto-St - Umr Cnrs 6174 - Utc/enanm/utbm

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- **Chair:** Chen, Weidong  
  **Co-Chair:** Yi, Jingang  
  **Organizer:** Chen, Weidong

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<td>Liu, Li, Shanghai Jiaotong Univ; Chen, Weidong, Shanghai Jiaotong Univ; Wang, Jingchuan, Shanghai Jiaotong Univ</td>
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<td>Liu, Yuan, Harbin Inst. of Tech; Yang, Dapeng, Harbin Inst. of Tech; Jiang, Li, Harbin Inst. of Tech; Liu, Hong, Harbin Inst. of Tech</td>
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<td>Becker, Daniel, Berlin Inst. of Tech; Thiele, Fabian, Berlin Inst. of Tech; Sawade, Oliver, Fraunhofer FOKUS; Radusch, Ilja, Fraunhofer FOKUS</td>
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<td>Liang, Guanhao, Zhejiang Univ; Wang, Yancheng, Zhejiang Univ; Mei, Deqing, Zhejiang Univ; Xi, Kailun, Zhejiang Univ; Chen, Zichen, Zhejiang Univ</td>
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<td>Yokozu, Ayanori, Keio Univ; Moriguchi, Yoshiki, Murata Machinery, Ltd; Takahashi, Masaki, Keio Univ</td>
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**Chair:** Chen, Xiang  
**Co-Chair:** Son, Hungsun  
**Organizer:** Chen, Weidong

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**Chair:** Lee, Jangmyung  
**Co-Chair:** Son, Jungbog  
**Organizer:** Busan National Univ. Busan, Korea

**Chair:** Oh, Sang-Rok  
**Co-Chair:** Hwang, Myung-Gyu  
**Organizer:** Korea Inst. of Science and Tech
**ThBT1**

**Advanced Medical and Human Assist Robots (Organized Session)**

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<td>Shimoda, Masamichi Shinshu Univ Yamazaki, Kimitoshi Shinshu Univ</td>
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<td>Jin, Jingfu Univ. of Texas at Dallas Kim, Yoon-Gu DGIST(Daejeon Gyeongbuk Inst. of Science &amp; Tech Wee, Sung-Gil DGIST Gans, Nicholas (Nick) Univ. Texas at Dallas</td>
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Abel, Dirk RWTH Aachen Univ
Hakenberg, Mathias RWTH Aachen Univ
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Sano, Akira Niigata Univ
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Katupitiya, Jayantha The Univ. of New South Wales
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Pano, Van Ryerson Univ
Hu, Yuqi Hunan Univ. of Science and Tech

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Co-Chair: Wang, Shaoping Beihang Univ
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Son, Hungsun Ulsan National Inst. of Science and Tech
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Mehmood, Usman Korea Univ. of Tech. and Education
Popov, Dmitry KOREATECH, Korea Univ. of Tech. and Education
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Gao, Juan  Qingdao Harbour Vocational and Tech. Coll.

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Asano, Fumihiko  Japan Advanced Inst. of Science and Tech.

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SIMTech

Kong, Chun Jeng

Singapore Inst. of Manufacturing Tech

Lin, Wei

SIMTech, A*STAR

Tay, Arthur

National Univ. of Singapore

Mamun, Abdullah Al

National Univ. of Singapore

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Singapore Inst. of Manufacturing Tech

Bai, Fengjun

Singapore Inst. of Manufacturing Tech


Zhang, Xiaoming

HuaZhong Univ. of Science and Tech

Zhang, Dong

HuaZhong Univ. of Science and Tech
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*National Inst. of Advanced Industrial Science and Tech*

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Lee, Dong-Hee  
*Kyungsun Univ*  
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**Co-Chair:** Kim, Byoung-Ho  
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*Kyungsun Univ*

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The Univ. of Auckland  
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Sharma, Rajnish  
The Univ. of Auckland

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<td>Zhang, Hongsheng</td>
<td>Beihang Univ</td>
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<td>Li, Yun-Ze</td>
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<td>Zhong, Ming Liang</td>
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<td>Li, Miaojie</td>
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<td>Liu, Yang</td>
<td>Beihang Univ</td>
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<td>Cuchet, Cécile</td>
<td>École Polytechnique Fédérale de Lausanne (EPFL)</td>
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<td>Espeanet, Christophe</td>
<td>Moving Magnet Tech. S.A</td>
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<td>Civet, Yoan</td>
<td>EPFL</td>
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<td>Perriard, Yves</td>
<td>École Pol. Fédérale De Lausanne (EPFL)</td>
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<td>Biwersi, Stéphane</td>
<td>Moving Magnet Tech. S.A</td>
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<td>Pi, Dawei</td>
<td>Nanjing Univ. of Science and Tech</td>
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<td>Chen, Xiaohan</td>
<td>Singapore Univ. of Tech. and Design</td>
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<td>Soh, Gim Song</td>
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<td>Foong, Shao Hui</td>
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<td>Otto, Kevin</td>
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<td>Univ. of Fukui</td>
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<td>Takahashi, Yasutake</td>
<td>Univ. of Fukui</td>
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<td>Huang, Shouren</td>
<td>Handong Global Univ</td>
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<td>Lee, Min Cheol</td>
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<tr>
<td>Ren, Qun</td>
<td>Ecole De Tech. Supérieure, Univ. of Quebec</td>
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Pusan National Univ

Research on the Medical Nd: YAG Laser Power System Using
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Pusan National Univ

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Waghmare, Laxman
SGGS Nanded

Takesue, Naoyuki
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Mitsuzumi, Takashi
Tokyo Metropolitan Univ
Nagasawa, Mikiro
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Ono, Akihito
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Takahashi, Satoru
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Korea Univ. of Tech. and Educ.
Co-Chair: Liu, Yen-Chen
National Cheng Kung Univ
Organizer: Ryu, Jee-Hwan
Korea Univ. of Tech. and Educ
Organizer: Yang, Gi-Hun
KITECH
Organizer: Hwang, Jung-Hoon
Korea Eletronics Tech. Inst
Organizer: Shin, Eun-Cheol
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Hashimoto, Shun Chuo Univ
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Balancing Control Application Using Gyroscopic Effect to a Hand-Carried One-Wheel Cart, pp. 1778-1782.
Ha, Minsoo Chungnam National Univ
Jung, Seul Chungnam National Univ
14:15-14:35 FrBT7.4

Predicting the Disconnection of Flocking Agents in a Swarm, pp. 1783-1788.
Naruse, Keitaro Univ. of Aizu
14:35-14:55 FrBT7.5

Fu, Guohe East China Normal Univ
Zhang, Xinyu East China Normal Univ
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3D Reconstruction of Complex Weld Geometry Based on Adaptive Sampling, pp. 1795-1800.
Keshmiri, Soheil National Univ. of Singapore
Tan, Yan Zhi National Univ. of Singapore
Ahmed, Syeda Mariam National Univ. of Singapore
Wu, Yue National Univ. of Singapore
Chew, Chee Meng National Univ. of Singapore
Pang, Chee Khiang National Univ. of Singapore
15:30-16:30 Invited Session III (Invited Session)
Chair: Jung, Seul Chungnam National Univ

Space Robotics Activities at HIT*
Liu, Hong Harbin Inst. of Tech
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Immersion and Admittance Control for Human-Touch Communication in Teleoperation (I), pp. 1795-1797.
Kim, Hyeongsook Korea Univ.
Kim, Jee Jung Korea Univ.
16:30-17:30 Invited Session III (Invited Session)
Chair: Zhang, Xinyu East China Normal Univ

Fu, Guohe East China Normal Univ
Zhang, Xinyu East China Normal Univ
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Fu, Guohe East China Normal Univ
Zhang, Xinyu East China Normal Univ
14:35-14:55 FrBT7.5

Fu, Guohe East China Normal Univ
Zhang, Xinyu East China Normal Univ
14:35-14:55 FrBT7.5

Fu, Guohe East China Normal Univ
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14:35-14:55 FrBT7.5

Fu, Guohe East China Normal Univ
Zhang, Xinyu East China Normal Univ
14:35-14:55 FrBT7.5