Scientific Program

4th World Congress on
Robotics and Artificial Intelligence

October 23-24, 2017  Osaka, Japan
### Day 1 October 23, 2017

#### Tatsuta

#### Keynote Forum

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30-10:15</td>
<td>Distributed task allocation for multi-robot systems in search and rescue scenario</td>
<td>Qinggang Meng</td>
<td>Loughborough University, UK</td>
</tr>
<tr>
<td>10:15-11:00</td>
<td>User centered design and rehabilitation robotics: Have we done enough?</td>
<td>Andrew Weightman</td>
<td>University of Manchester, UK</td>
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</tbody>
</table>

#### Group Photo

#### Networking & Refreshment Break 11:00-11:15 @3F Regency A

#### Sessions:
- Robotics
- Human-Robot Interaction
- Robotics and Mechatronics
- Robot Manipulators
- Multi Robot Systems
- Remote and Telerobotics

#### Session Introduction

**Session Chair:** Henrique Martins, President of the Board of SPMS, Portugal

**Session Co-chair:** Wenbo Wang, Nanjing University of Aeronautics and Astronautics, China

#### 11:15-11:45

<table>
<thead>
<tr>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>A case study for the design and development of a robotic device for spray applied insulation in underfloor voids</td>
<td>Mathew Holloway</td>
<td>Imperial College London, UK</td>
</tr>
</tbody>
</table>

#### Lunch Break 12:45-13:45 @3F Regency A

#### 13:45-14:15

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<thead>
<tr>
<th>Title</th>
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<tbody>
<tr>
<td>The promise of direct neural control of powered prosthetic limbs via peripheral nerve interfacing: Techniques, successes and current issues</td>
<td>Ronald R Riso</td>
<td>Massachusetts Inst. Tech, USA</td>
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</tbody>
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#### 14:15-14:45

<table>
<thead>
<tr>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Robo-pigeon flying under preprogram-control outdoors</td>
<td>Hao Wang</td>
<td>Nanjing University of Aeronautics &amp; Astronautics, China</td>
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#### 14:45-15:15

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<tbody>
<tr>
<td>How humans perceive arm perturbations in haptic based robotic guiding</td>
<td>Anuradha Ranasinghe</td>
<td>Liverpool Hope University, UK</td>
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</tbody>
</table>

#### 15:15-15:45

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Turning behavior elicited by electrical stimulation in a Robo-pigeon</td>
<td>Lei Cai</td>
<td>Biology Institute of Shandong Academy of Sciences, China</td>
</tr>
</tbody>
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#### 15:45-16:15

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Understanding and exploiting natural dynamics for highly dynamic motion of underactuated robots</td>
<td>Ziad Zamzami</td>
<td>Sorbonne University, France</td>
</tr>
</tbody>
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#### Networking & Refreshment Break 16:15-16:30 @3F Regency A

#### Panel Discussions

### Day 2 October 24, 2017

#### Tatsuta

#### Keynote Forum

<table>
<thead>
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<th>Time</th>
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<tr>
<td>09:30-10:15</td>
<td>eHealth in Portugal and Intelligent Machines</td>
<td>Henriques Martin</td>
<td>Beira Interior University, Portugal</td>
</tr>
<tr>
<td>10:15-11:00</td>
<td>Biomedical microsystem for neuro interface: Monitoring, stimulations, and its application in brain-machine interface</td>
<td>Hyunjoo J Lee</td>
<td>KAIST, Korea</td>
</tr>
</tbody>
</table>
Networking & Refreshment Break 11:00-11:15 @3F Regency A

Session Introduction

Session Chair: Qinggang Meng, Loughborough University, UK
Session Co-chair: Andrew Weightman, University of Manchester, UK

11:15-11:45
Title: Miniature microdrive for locomotion control in freely moving lizard Gekko gecko
Wenbo Wang, Nanjing University of Aeronautics and Astronautics, China

11:45-12:15
Title: The substrate reaction forces acting on a gecko's limbs responding to inclines
Zhouyi Wang, Nanjing University of Aeronautics and Astronautics, China

12:15-12:45
Title: Window media player remotely controlled with human palm gestures using arduino
Manoj Kumar Sharma, Amity University Jaipur, India

Lunch Break 12:45-13:45 @3F Regency A

Young Researchers Forum

13:45-14:15
Title: Low cost robotic tape library systems using open source software and hardware
Nkhumise, RM, Square Kilometer Array (SKA), South Africa

14:15-14:45
Title: Improvement of speaker recognition tasks using deep learning and fusion features
Youssouf Ismail Cherifi, Institute of Electrical & Electronic Engineering, Algeria

14:45-15:15
Title: Terrain classification for unmanned ground vehicle in an unstructured environment
Antonius Mamphiswana, University of the Witwatersrand, South Africa

15:15-15:45
Title: AI as future digital citizens: Overcoming the hard problem of consciousness with emotional responses and touch sense conditioning
Shannon D Bohle, Archivopedia LLC, USA

Panel Discussions

Awards and Closing Ceremony

Networking & Refreshment Break 16:00-16:15 @ 3F Regency A

Next in Series

6th World Congress on
Robotics and Artificial Intelligence

September 19-20, 2018  Singapore

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Website: https://robotics.conferenceseries.com