Scientific Program

4<sup>th</sup> World Congress on

# Robotics and Artificial Intelligence

October 23-24, 2017 Osaka, Japan



Hosting Organization: Conference Series LLC One Commerce Center-1201, Orange St. #600, Wilmington, Zip-19899, Delaware, USA Ph: +1-702-508-5200, Fax: +1-650-618-1417, Toll free: +1-800-216-6499 Email: roboticscongress@enggconferences.com | roboticscongress@nanotechconferences.org

| 08:45-09:15 | Registrations |
|-------------|---------------|
|-------------|---------------|

Day 1 October 23, 2017

Tatsuta

### conferenceseries.com 09:15-09:30 Opening Ceremony

|                                | Keynote Forum  |
|--------------------------------|--|
| 09:30-10:15                    | Title: Distributed task allocation for multi-robot systems in search and rescue scenario                 |
|                                | Qinggang Meng, Loughborough University, UK   |
| 10:15-11:00                    | Title: User centered design and rehabilitation robotics: Have we done enough?                            |
|                                | Andrew Weightman, University of Manchester, UK   |
|                                | Group Photo  |
|                                | Networking & Refreshment Break 11:00-11:15 @3F Regency A   |
| Sessions:                      |  |
| Robotics   Hum<br>Telerobotics | an-Robot Interaction   Robotics and Mechatronics   Robot Manipulators   Multi Robot Systems   Remote and |
|                                | Session Introduction   |
| Session Chair                  | : Henrique Martins, President of the Board of SPMS, Portugal   |
| Session Co-ch                  | air: Wenbo Wang, Nanjing University of Aeronautics and Astronautics, China                               |
|                                | Title: A case study for the design and development of a robotic device for spray applied insulation in   |
| 11:15-11:45                    | underfloor voids<br>Mathew Holloway, Imperial College London, UK   |
| 11:45-12:15                    | Title: Mechatronics: The gateway to the national development   |
|                                | Anjali Vishwas Kulkarni, Indian Institutes of Technology Kanpur, India                                   |
| 12:15-12:45                    | Title : Development of fully autonomous unmanned aerial systems  |
|                                | Ben M. Chen, National University of Singapore, Singapore   |
|                                | Lunch Break 12:45-13:45 @3F Regency A  |
| 13:45-14:15                    | Title: The promise of direct neural control of powered prosthetic limbs via peripheral nerve             |
|                                | interfacing: Techniques, successes and current issues  |
|                                | Ronald R Riso, Massachusetts Inst. Tech, USA   |
| 14:15-14:45                    | Title: Robo-pigeon flying under preprogram-control outdoors  |
|                                | Hao Wang, Nanjing University of Aeronautics & Astronautics, China  |
| 14:45-15:15                    | Title: How humans perceive arm perturbations in haptic based robotic guiding                             |
|                                | Anuradha Ranasinghe, Liverpool Hope University, UK   |
| 15:15-15:45                    | Title: Turning behavior elicited by electrical stimulation in a Robo-pigeon                              |
|                                | Lei Cai, Biology Institute of Shandong Academy of Sciences, China  |
| 15:45-16:15                    | Title: Understanding and exploiting natural dynamics for highly dynamic motion of underactuated robots   |
|                                | Ziad Zamzami, Sorbonne University, France  |
|                                | Networking & Refreshment Break 16:15-16:30 @3F Regency A   |

Panel Discussions

|             | Day 2 October 24, 2017  |  |  |
|-------------|---|--|--|
| Tatsuta     |   |  |  |
|             | Keynote Forum   |  |  |
| 09:30-10:15 | Title: eHealth in Portugal and Intelligent Machines   |  |  |
|             | Henriques Martin, Beira Interior University, Portugal   |  |  |
| 10:15-11:00 | Title: Biomedical microsystem for neuro interface: Monitoring, stimulations, and its application in brain-<br>machine interface |  |  |
|             | Hyunjoo J Lee, KAIST, Korea   |  |  |

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

Sessions:

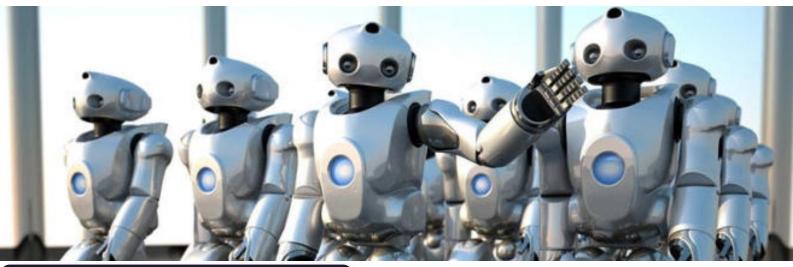
Micro Electro Mechanical Systems (MEMS) and Micro Robots | Neural Networks | Aerial Robotics and UAV | Intelligent Autonomous Systems and Robots | Medical Robotics | Artificial Intelligence

| 36331011 11111000001101 | Session | Introd | uction |
|-------------------------|---------|--------|--------|
|-------------------------|---------|--------|--------|

| <b>Session Chair:</b> | Qinggang Meng, Loughborough University, UK   |  |  |  |
|-----------------------|--|--|--|--|
| Session Co-ch         | air: 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   |  |  |  |
| Video Presentation    |  |  |  |  |
| 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

## 6<sup>th</sup> World Congress on **Robotics and Artificial Intelligence**

#### September 19-20, 2018 Singapore

e-mail: roboticscongress@enggconferences.com | roboticscongress@nanotechconferences.org Website: https://robotics.conferenceseries.com