2019 IEEE 4th International Conference on Advanced Robotics and Mechatronics (ICARM 2019)

Toyonaka, Japan
3 – 5 July 2019

Pages 1-509

IEEE

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Contents

Wednesday, July 3, 2019

Regular Session (Actuators 1)

WeSM1T2: 11:00 - 13:00   Osaka University, Seminar Room

Chairs: Guibin Bian, Institute of Automation, Chinese Academy of Sciences,China
**   Xinyu Li, Huazhong University of Science and Technology, China**

Wednesday, July 3, 2019

Regular Session (Award 1)

WeSH2T1: 14:00 - 16:00   Osaka University, Sigma Hall

Chairs: Jia Pan, University of Hong Kong, China
**   Long Chen, Sun Yat-sen University, China**

Wednesday, July 3, 2019

Regular Session (Brain Interface)

WeSH2T2: 14:00 - 16:00   Osaka University, Seminar Room

Chairs: Chi Zhu, Maebashi Institute of Technology, Japan

**   Feng Duan, Nankai University, China**

Wednesday, July 3, 2019

Regular Session (Algorithm 1)
WeSH2T3: 14:00 - 16:00   Osaka University, G417

Chairs: Qinghua Huang, Northwestern Polytechnical University, China
**   Jian Huang, Huazhong University of Science and Technology, China**

Wednesday, July 3, 2019

Regular Session (Control 1)
WeSH2T4: 14:00 - 16:00   Osaka University, G419

Chairs: Zhaojie Ju, the University of Portsmouth, UK
**   Yu Liu, South China University of Technology, China**

Wednesday, July 3, 2019

Regular Session (Grasp and Manipulation 1)

WeSH3T1: 16:30 - 18:30   Osaka University, Sigma Hall

Chairs: Ribas Neto, Department of Comp. Eng. and Industrial Autom,UNICAMP (BR)

**   Hayato Hagiwara, Meisei University, Japan**

Wednesday, July 3, 2019

Regular Session (Actuators 2 & Parallel Robots)
WeSH3T2: 16:30 - 18:30   Osaka University, Seminar Room

Chairs: Shengchao Zhen, Hefei University of Technology, China
**   Onur Ersoy, Ozyegin University, Istanbul**

Wednesday, July 3, 2019

Regular Session (Rehability)

WeSH3T3: 16:30 - 18:30   Osaka University, G417

Chairs: Hieyong Jeong, Osaka University, Japan
**   Grantham K.H. Pang, The University of Hong Kong, China**

Plugging Brake System as a Hill Descend Control for Electric Powered Wheelchair: Experimental Analysis

Wednesday, July 3, 2019

Regular Session (Mobile Robots 1)

WeSH3T4: 16:30 - 18:30   Osaka University, G419

Chairs: Jianjun Yuan, Shanghai University, China

**   Junjun Wu, Foshan University, China**

Thursday, July 4, 2019

Regular Session (Human Robot Interaction 1)

ThSM1T2: 11:00 - 13:00   Osaka University, Seminar Room

Chairs: Gentiane Venture, Tokyo University of Agriculture and Technology

**   Chenguang Yang, University of the West of England**

Thursday, July 4, 2019

Regular Session (Award 2)

ThSH2T1: 14:00 - 16:00   Osaka University, Sigma Hall

Chairs: Xiangui Xu, Wuhan University of Technology, China

**   Zhihao Shen, Japan Advanced Institute of Science and Technology, Japan**

Thursday, July 4, 2019

Regular Session (Human Robot Interaction 2 &Exoskeleton 1)

ThSH2T2: 14:00 - 16:00   Osaka University, Seminar Room

Chairs: Shiije Guo, Hebei University of Technology, China

        Rui Song, Shandong University, China

Thursday, July 4, 2019

Regular Session (Algorithm 2)

ThSH2T3: 14:00 - 16:00   Osaka University, G417

Chairs: Hui Cao, Xi'an Jiaotong University, China

        Mou Chen, Nanjing University of Aeronautics and Astronautics, China

Thursday, July 4, 2019

Regular Session (Control 2)

ThSH2T4: 14:00 - 16:00   Osaka University, G419

Chairs: Zhengxiong Liu, Northwestern Polytechnical University, China
**   Yongchun Fang, Nankai University, China**

Thursday, July 4, 2019

Regular Session (Grasp and Manipulation 2)

ThSH3T1: 16:30 - 18:30   Osaka University, Sigma Hall

Chairs: Ying Feng, South China University of Technology, China

**   Sihang Zhang , University of Science and Technology of China, China**

Thursday, July 4, 2019

Regular Session (Exoskeleton 2)

ThSH3T2: 16:30 - 18:30   Osaka University, Seminar Room

Chairs: Ao Peng, Xiamen University, China

Kui Xiang ,Wuhan University of Technology, China

Thursday, July 4, 2019

Regular Session (Drone)

ThSH3T3: 16:30 - 18:30   Osaka University, G417

Chairs: Yimin Zhou, Shenzhen Institutes of Advanced Technology,Chinese Academy of Sciences, China

Thursday, July 4, 2019

Regular Session (Application)

ThSH3T4: 16:30 - 18:30   Osaka University, G419

Chairs: Jun Wang, Hefei University, China

**   Liang DU, Ritsumeikan University, Japan**

Friday, July 5, 2019

Regular Session(Grasp and Manipulation 4)

Friday, July 5, 2019

Friday, July 5, 2019

Regular Session (Biomimetics && Multileg Robots)

FrSH2T2: 14:00 - 16:00   Osaka University, Seminar Room

Chairs: Huaping Liu, Tsinghua University, China
             Huayan Pu, Shanghai University, China

Friday, July 5, 2019

Regular Session (Control 3)

FrSH2T3: 14:00 - 16:00   Osaka University, G417

Chairs: Jinjun Rao, Shanghai University, China

          Shouxu Zhang, Northwestern Polytechnical University, China

Friday, July 5, 2019

Regular Session (Vision)

FrSH2T4: 14:00 - 16:00   Osaka University, G419

Chairs: Linhua Jiang, Shanghai for Science and Technology, China

Qinghua Huang, Northwestern Polytechnical University, China

Friday, July 5, 2019

Regular Session (Humanoids)

FrSH3T1: 16:30 - 18:30   Osaka University, Sigma Hall

Chairs: Wentao Sheng, Harbin Institute of Technology, China

Gui-Bin Bian, Institute of Automation, Chinese Academy of Sciences, China

Friday, July 5, 2019

Regular Regular Session (Vehicles)

FrSH3T2: 16:30 - 18:30   Osaka University, Seminar Room

Chairs: Hongbo Gao, University of Science and Technology of China, China

**   Ming Yue, Dalian University of Technology, China**

Friday, July 5, 2019

Regular Session (Mobile Robots 2 & Multi-Robot Cooperation)

FrSH3T3: 16:30 - 18:30   **Osaka University, G417**

Chairs: Zhi-Hong Guan, Huazhong University of Science and Technology, China
             Zhong-Hua Pang, North China University of Technology, China

Friday, July 5, 2019

Regular Session (Control 4)

FrSH3T4: 16:30 - 18:30   **Osaka University, G419**

Chairs: Yu Liu, South China University of Technology, China

         Mingming Qiu, Hefei University of Technology, China