The 28th IEEE International Conference on Robot & Human Interactive Communication
Ro-Man 2019
14 – 18 Oct, 2019
Le Meridien, Windsor Place, New Delhi, India

Technical Program Schedule
15 Oct 2019 (Day 1)

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9:00-10:00   Plenary Talk III
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<th>Motion Planning Navigation &amp; Control in Human Centred Environment</th>
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12:00-13:00  Lunch Break
13:00-15:00  Poster Session (55 Papers)
15:00-15:30  Tea Break
15:30-17:00  Parallel Session 5

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17:00-18:00  Panel Discussion on Responsible Robotics and AI for the Real World

19:00 Onwards – Banquet Dinner and Award Ceremony
## Special Session 1: Transparency and Trust in Human Robot Interaction

### 23- Verbal Explanations for Deep Reinforcement Learning Neural Networks with Attention on Extracted Features

- Wang Xinzhi, Tsinghua University
- Yuan Shengcheng, LazyComposer Inc., Beijing
- Zhang Hui, Tsinghua University
- Sycara Katia, Carnegie Mellon University
- Lewis Mike, Univ of Pittsburgh

### 161 – Coherent and Incoherent Robot Emotional Behavior for Humorous and Engaging Recommendations

- Rossi Silvia, University of Naples Federico II
- Cimmino Teresa, University of Naples Federico II
- Matarese Marco, University of Naples Federico II
- Raiano, Mario, University of Naples Federico II

### 206 – Getting to Know Kaspar: Effects of People's Awareness of a Robot's Capabilities on Their Trust in the Robot

- Rossi Alessandra, University of Hertfordshire
- Moros Silvia, University of Hertfordshire
- Koay Kheng Lee, University of Hertfordshire
- Walters Michael Leonard, University of Hertfordshire
- Dautenhahn Kerstin, University of Waterloo

### 71 – Privacy First: Designing Responsible and Inclusive Social Robot Applications for in the Wild Studies

- Tonkin Meg, University of Technology Sydney
- Vitale Jonathan, University of Technology Sydney
- Herse Sarita, University of Technology Sydney
- Raza Syed Ali, University of Technology Sydney
- Madhisetty Srinivas, University of Technology Sydney
- Kang Le, Vu, University of Technology Sydney
- Johnston Benjamin, University of Technology Sydney
- Williams Mary-Anne, University of Technology Sydney

### 75 – Trust Repair in Human-Swarm Teams

- Liu, Rui, Kent State University
- Cai, Zekun, University of Pittsburgh
- Lewis, Mike, Univ of Pittsburgh
- Lyons, Joseph, AFRL
- Sycara, Katia, Carnegie Mellon University

### 99 – You Are Doing so Great! the Effect of a Robots Interaction Style on Self-Efficacy in HRI

- Zafari Setareh, Vienna University of Technology
- Schwaninger Isabel, TU Wien
- Hirschmanner Matthias, TU Wien
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183, 210, 298, 162, 193, 271

183 – Designing an Experimental and a Reference Robot to Test and Evaluate the Impact of Cultural Competence in Socially Assistive Robotics
Recchiuto Carmine Tommaso, University of Genova
Papadopoulos Chris, University of Bedfordshire UK
Hill Tetiana, University of Bedfordshire UK
Castro Nina, Advinia Healthcare, UK
Bruno Barbara, University of Genova
Papadopoulos Irena, Middlesex University Higher Education Corporation
Sgorbissa Antonio, University of Genova

210 – Using Socially Expressive Mixed Reality Arms for Enhancing Low-Expressivity Robots
Groechel Thomas, University of Southern California
Shi Zhonghao, University of Southern California
Pakkar Roxanna, University of Southern California
Mataric Maja, University of Southern California

298 – Wearable Affective Robot That Detects Human Emotions from Brain Signals by Using Deep Multi-Spectrogram Convolutional Neural Networks (Deep MS-CNN)
Wang Ker-Jiun, University of Pittsburgh
ZHENG Caroline Yan, Royal College of Art

162 – Real-Time Gazed Object Identification with a Variable Point of View Using a Mobile Service Robot
Yuguchi Akishige, Nara Institute of Science and Technology
Inoue Tomoaki, Nara Institute of Science and Technology
Garcia Ricardez Gustavo Alfonso, Nara Institute of Science and Technology
Ding Ming, Nara Institute of Science and Technology
Takamatsu Jun, Nara Institute of Science and Technology
Ogasawara Tsukasa, Nara Institute of Science and Technology

193 – A Reinforcement-Learning Approach for Adaptive and Comfortable Assistive Robot Monitoring Behaviors
Raggioli, Luca, University of Naples Federico II
Rossi, Silvia, University of Naples Federico II
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<td>Hospital Receptionist Robot V2: Design for Enhancing Verbal Interaction</td>
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<td>University of Auckland, Sungkyunkwan University,</td>
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Del Duchetto, Francesco University of Lincoln
Baxter, Paul Edward University of Lincoln
Hanheide, Marc University of Lincoln

Special Session 4: Robotics for Rehabilitation
80, 116, 205, 166, 88, 112

80 – Preliminary Evaluation of a Closed-Loop Social Robot for Reading Comprehension Testing
Migovich, Miroslava University of Tennessee
McCarthy, Jillian University of Tennessee Health Science Center
Wade, Eric University of Tennessee

116 – Evaluation of Physical Therapy through Analysis of Depth Images
Kramer, Ivanna University of Koblenz-Landau
Memmesheimer, Raphael University of Koblenz-Landau
Schmidt, Niko University of Koblenz-Landau
Paulus, Dietrich University Koblenz-Landau

205 – Optimal Feature Selection for EMG-Based Finger Force Estimation Using LightGBM Model
Ye, Yuhang South China University of Technology
Liu, Chao LIRMM (UMR5506), CNRS, France
Zemiti, Nabil LIRMM (UMR5506), CNRS, France
Yang, Chenguang University of the West of England

166 – Learning Robot Policies Using a High-Level Abstraction Persona-Behaviour Simulator
Andriella, Antonio IRI, CSIC-UPC
Torras, Carme CSIC – UPC
Alenyà, Guillem CSIC-UPC

88 – Estimating the Effect of Robotic Intervention on Elbow Joint Motion
Ghonasi, Keya The University of Texas at Austin
De Oliveira, Ana Christine The University of Texas at Austin
Shafer, Anna University of Texas at Austin
Rose, Chad University of Texas at Austin
Deshpande, Ashish University of Texas

112 – Development and Applicability of a Cable-driven Wearable Adaptive Rehabilitation Suit (WeARS)
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Maria Joseph, Felix Orlando  Indian Institute of Technology Roorkee

301 – Simultaneously Concentrated PSWF-Based Synchrosqueezing S-Transform and Its Application to R Peak Detection in ECG Signal
Singh, Neha  IIT Roorkee
Deora, Puneesh  IIT Roorkee
Pradhan, PyariMohan  IIT Roorkee

273 – Continuous Higher Order Sliding Mode Control of Bevel-Tip Needle for Percutaneous Interventions
Maria Joseph, Felix Orlando  Indian Institute of Technology Roorkee

295 - Development of an Intelligent Cane for Visually Impaired Human Subjects
Maria Joseph, Felix Orlando  Indian Institute of Technology Roorkee

227 – Intention Detection and Gait Recognition (IDGR) System for Gait Assessment: A Pilot Study
Singh, Yogesh  Indian Institute of Technology Gandhinagar
Kher, Manan  Institute of Technology, Nirma University
Vashista, Vineet  Indian Institute of Technology Gandhinagar

235 - Transferring Dexterous Surgical Skill Knowledge between Robots for Semi-Autonomous Teleoperation
Md Masudur Rahman,  Purdue University - West Lafayette
Natalia Sanchez-Tamayo,  Purdue University - West Lafayette
Glebys Gonzalez,  Purdue University - West Lafayette
Mridul Agarwal,  Purdue University - West Lafayette
Aggarwal Vaneet,  Purdue University - West Lafayette
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Vohra, Mohit  Indian Institute of Technology, Kanpur
Behera, Laxmidhar  IIT Kanpur

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Agarwal, Akshat  Carnegie Mellon University
Hope, Ryan  Carnegie Mellon University
Sycara, Katia  Carnegie Mellon University

172 – Estimating Optimal Placement for a Robot in Social Group Interaction
Pathi, Sai Krishna  Örebro University
Kristofferson, Annica  Mälardalen University
Kiselev, Andrey  Örebro University
Loutfi, Amy  Örebro University

18 – ROS-TiPlEx: How to Make Experts in A.I. Planning and Robotics Talk Together and Be Happy
La Viola, Carlo  ISTC-CNR
Orlandini, Andrea  National Research Council of Italy
Umbrico, Alessandro  National Research Council of Italy
Cesta, Amedeo  CNR -- National Research Council of Italy, ISTC

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Tanaka, Fumihide  University of Tsukuba

10 – Learning Sequential Human-Robot Interaction Tasks from Demonstrations: The Role of Temporal Reasoning
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Clark-Turner, Madison  University of New Hampshire
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Caballero, Fernando  Universidad Pablo de Olavide
Nakamura, Keisuke  Honda Research Institute Japan Co., Ltd.
Merino, Luis  Universidad Pablo de Olavide
Gomez, Randy  Honda Research Institute Japan Co., Ltd.

35 – A Common Social Distance Scale for Robots and Humans
Banks, Jaime  Texas Tech University
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45 – Transparent Robot Behavior Using Augmented Reality in Close Human-Robot Interaction
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Dillmann, Rüdiger  FZI - Forschungszentrum Informatik - Karlsruhe

95 – Your Robot Is Watching: Using Surface Cues to Evaluate the Trustworthiness of Human Actions
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180 – Spatially Situated End-User Robot Programming in Augmented Reality
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Beran, Vitezslav  Brno University of Technology
Materna, Zdenek  Brno University of Technology
Bambusek, Daniel  Brno University of Technology

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Garofalo, Roberto  E. Piaggio Research Center
De Rossi, Danilo  University of Pisa

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Doelling, Kris  University of Texas at Arlington
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Fields, Noelle  University of Texas at Arlington

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Paiva, Ana  INESC-ID and Instituto Superior Técnico
Mascarenhas, Samuel  INESC-ID / Instituto Superior Técnico, University of Lisbon
Santos, Pedro A.  Instituto Superior Técnico
Prada, Rui  INESC ID, Instituto Superior Técnico, University of Lisbon

77 – Eyes on You: Field Study of Robot Vendor Using Human-Like Eye Component “Akagachi”
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Utsumi, Akira ATR Intelligent Robotics and Communication Labs.
Nagasawa, Isamu SUBARU Co., LTD.
Iwaki, Satoshi Hiroshima City University

212 – Combining Electromyography and Fiducial Marker Based Tracking for Intuitive
Telemanipulation with a Robot Arm Hand System
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Liarokapis, Minas University of Auckland

55 – Humanoid Co-Workers: How Is It Like to Work with a Robot?
Vishwanath, Ajay Nanyang Technological University
Singh, Aalind Institute for Media Innovation
Chua, Yi Han Victoria Nanyang Technological University
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Racca, Mattia  Aalto University
Weir, Daryl  Futurice Oy
Kyrki, Ville  Aalto University

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Norman, Utku  EPFL
JOHAL, Wafa  EPFL
Olsen, Jennifer  EPFL
Shahmoradi, Sina  EPFL
Dillenbourg, Pierre  EPFL

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Sandygulova, Anara  Nazarbayev University

290 – Design and Perception of a Social Robot to Promote Hand Washing among Children in a Rural Indian School
Radhakrishnan, Unnikrishnan  Amrita University
Deshmukh, Amol  University of Glasgow
Ramesh, Shanker  AMMACHI Labs, Amrita Vishwa Vidyapeetham
K Babu, Sooraj  AMMACHI Labs, Amrita Vishwa Vidyapeetham
A, Parameswari  AMMACHI labs, Amrita Vishwa Vidyapeetham
Rao R, Bhavani  Amrita Vishwa vidyapeetham University

297 – The Effect of Interaction and Design Participation on Teenagers' Attitudes towards Social Robots
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Xu, Wendy M.  University of Washington
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Elangovan, Nathan University of Auckland
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68 – Design and Analysis of a Soft Bidirectional Bending Actuator for Human-Robot Interaction Applications
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175 – Instrumented Shoe Based Foot Clearance and Foot-To-Ground Angle Measurement System for the Gait Analysis
Tiwari, Ashutosh Indian Institute of Technology
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Joshi, Deepak Indian Institute of Technology

178 – Energy Conscious Over-Actuated Multi-Agent Payload Transport Robot
Tallamraju, Rahul International Institute of Information Technology, Hyderabad
Verma, Pulkit International Institute of Information technology, Hyderabad
Sripada, Venkatesh Oregon State University, Corvallis, USA
Agrawal, Shrey International Institute of Information Technology, Hyderabad
Karlapalem, Kamalakar IIIT, Hyderabad

218 – Effect of Human Hand Dynamics on Haptic Rendering of Stiff Springs Using Virtual Mass Feedback
Desai, Indrajit Indian Institute of Technology Bombay
Gupta, Abhishek Indian Institute of Technology, Bombay
Chakraborty, Debraj Indian Institute of Technology Bombay

265 – DronePick: Object Picking and Delivery Teleoperation with the Drone Controlled by a Wearable Tactile Display
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Fry, Katelyn  Georgia Institute of Technology
Chen, Yu-ping  Georgia State University
Howard, Ayanna  Georgia Institute of Technology

108 – AppGAN: Generative Adversarial Networks for Generating Robot Approach Behaviors into Small Groups of People
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113 – Effective Robot Evacuation Strategies in Emergencies
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Wagner, Alan Richard  Penn State University

128 – Surprise! Predicting Infant Visual Attention in a Socially Assistive Robot Contingent Learning Paradigm
Klein, Lauren  University of Southern California
Itti, Laurent  University of Southern California
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Rosales, Marcelo R.  University of Southern California
Nikolaidis, Stefanos  UNIVERSITY OF SOUTHERN CALIFORNIA
Mataric, Maja  University of Southern California

134 – Learning Socially Appropriate Robot Approaching Behaviour Toward Groups Using Deep Reinforcement Learning
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Frisk, Martin  Uppsala University
Hernandez, Daniel  University of York
Peters, Christopher  Royal Institute of Technology
Castellano, Ginevra  Uppsala University

De Jong, Chiara  University of Amsterdam
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Peter, Jochen  University of Amsterdam
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Barco, Alex  University of Amsterdam

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Singhal, Shivam  University of Washington
Yi, Daqing  University of Washington
Bhattacharjee, Tapomayukh  University of Washington
Srinivasa, Siddhartha  University of Washington

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Chau, Aaron  University of Calgary
Sekiguchi, Kouhei  Kyoto University
Nugraha, Aditya Arie RIKEN AIP
Yoshii, Kazuyoshi  Kyoto University
Funakoshi, Kotaro  Honda Research Inst. Japan Co., Ltd.

280 – Teaching a Robot How to Spatially Arrange Objects: Representation and Recognition Issues
Buoncompagni, Luca  University of Genoa
Mastrogiovanni, Fulvio  University of Genoa

299 – Simple, Inexpensive, Accurate Calibration of 9 Axis Inertial Motion Unit
Das, Shome S  Indian Institute of Science, Bangalore

157 – Towards a Driver Monitoring System for Estimating Driver Situational Awareness
Hijaz, Alaaldin  Oakland University
Louie, Wing-Yue Geoffrey  Oakland University
Mansour, Iyad  Dura Automotive

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Clodic, Aurélie LAAS-CNRS
Alami, Rachid CNRS

181 – Mind perception and causal attribution for failure in a game with a robot
Miyake, Tomohito Osaka University
Kawai, Yuji Osaka University
Park, Jihoon Osaka University
Shimaya, Jiro Osaka University
Takahashi, Hideyuki Osaka university
Asada, Minoru Osaka University

260 – Accuracy Improvement of Facial Expression Recognition in Speech Acts: Confirmation of Effectiveness of Information Around a Mouth and GAN-Based Data Augmentation
Song, KyuSeob KAIST (Korea Advanced Institute of Science and Technology)
Kwon, Dong-Soo KAIST

189 – Conflict Mediation in Human-Machine Teaming: Using a Virtual Agent to Support Mission Planning and Debriefing
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Tobias, Jessica United States Air Force Academy
Waligora, Justin United States Air Force Academy
Phillips, Elizabeth Brown University
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Gale, Lucas University of Southern California
De Visser, Ewart George Mason University
Jonathan, Gratch University of Southern California
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Mayet, Ralf Hanson Robotics
Diprose, James Hanson Robotics
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Schulz, Trenton  University of Oslo
Holthaus, Patrick  University of Hertfordshire
Amirabdollahian, Farshid  The University of Hertfordshire
Koay, Kheng Lee  University of Hertfordshire
Torresen, Jim  University of Oslo
Herstad, Jo  University of Oslo

Regular Session 10: HRI and Collaboration in Manufacturing Environment (144, 258, 145, 131, 256, 168)

144 – Combining Interactive Spatial Augmented Reality with Head-Mounted Display for End-User Collaborative Robot Programming
Bambusek, Daniel  Brno University of Technology, Faculty of Information Technology
Materna, Zdenek  Faculty of Information Technology, Brno University of Technology
Kapinus, Michal  Brno University of Technology, Faculty of Information Technology
Beran, Vitezslav  Brno University of Technology
Smrz, Pavel  Brno University of Technology

258 – Modulating Human Input for Shared Autonomy in Dynamic Environments
Mower, Christopher Edwin  University of Edinburgh
Moura, Joao  Heriot-Watt University
Davies, Aled  Costain Group PLC
Vijayakumar, Sethu  University of Edinburgh

Eto, Haruhiko  Massachusetts Institute of Technology
Asada, Harry  MIT

Ishihata, Kenji  Hiroshima City University
Sato, Kenjiro  Hiroshima City University
Fukui, Yuta  Hiroshima City University
Iwaki, Satoshi  Hiroshima City University
Ikeda, Tetsushi  Hiroshima City University
256 – Model Checking Human-Agent Collectives for Responsible AI
Abeywickrama, Dhaminda University of Southampton
Cirstea, Corina University of Southampton
Ramchurn, Sarvapali University of Southampton

168 – IoT Based Submersible ROV for Pisciculture
Rohit, Mehboob Hasan North South University
Barua, Sailanjan North South University
Akter, Irin North South University
Karim, S M Mujibul North South University
Akter, Sharmin North South University
Elahi, M. M. Lutfe North South University

Regular Session 11: Social Robots III

139, 146, 158, 187, 191, 259

139 – Teaching Pepper Robot to Recognize Emotions of Traumatic Brain Injured Patients Using Deep Neural Networks
Ilyas, Chaudhary Muhammad Aalborg University
Schmuck, Viktor Aalborg University, Denmark
Haque, Mohammad Ahsanul Aalborg University
Nasrollahi, Kamal Aalborg University
Rehm, Matthias Aalborg University
Moeslund, Thomas B. Aalborg University

146 – Mood Estimation As a Social Profile Predictor in an Autonomous, Multi-Session, Emotional Support Robot for Children
Gamborino, Edwinn National Taiwan University
Yueh, Hsiu-Ping National Taiwan University
Lin, Weijane National Taiwan University
Yeh, Su-Ling National Taiwan University
Fu, Li-Chen National Taiwan University

158 – Mapping Robotic Affordances with Pre-Requisite Learning Interventions for Children with Autism Spectrum Disorder
Shukla, Jainendra Indraprastha Institute of Information Technology, Delhi Suri,
Venkata Ratnadeep Indraprastha Institute of Information Technology, Delhi
Garg, Jatin Indraprastha Institute of Information Technology Delhi
Verma, Krit Indraprastha Institute Of Information Technology Delhi
Kansal, Prarthana IIIT Delhi
187 – Health Counseling by Robots: Modalities for Breastfeeding Promotion
Murali, Prasanth  Khoury College of Computer Science
O'Leary, Teresa  Khoury College of Computer and Information Science
Shamekhi, Ameneh  Northeastern University
Bickmore, Timothy  Northeastern University

191 – Persuasive ChairBots: A (Mostly) Robot-Recruited Experiment
Agnihotri, Abhijeet  Oregon State University
Knight, Heather  Oregon State University

259 – Robot-Assisted Therapy for Children with Delayed Speech Development: A Pilot Study
Zhanatkyzy, Aida  Nazarbayev University
Turarova, Aizada  Nazarbayev University
Telisheva, Zhansaule  Nazarbayev University
Abylkasymova, Galiya  Republican Children's Rehabilitation Center
Sandygulova, Anara  Nazarbayev University

Regular Session 12: Visual Perception and Autonomous Robots
65, 96, 121, 140, 160, 173

65 – Grasping of Novel Objects for Robotic Pick and Place Applications
Vohra, Mohit  Indian Institute of Technology, Kanpur
Prakash, Ravi  Indian Institute of Technology, Kanpur
Behera, Laxmidhar  Indian Institute of Technology, Kanpur

96 – A Novel Image-based Path Planning Algorithm for Eye-in-Hand Visual Servoing of a Redundant Manipulator in a Human Centered Environment
Raina, Deepak  TCS Robotics Innovation Lab
P, Mithun  International Institute of Information Technology Hyderabad
Shah, Suril Vijaykumar  Indian Institute of Technology Jodhpur
Swagat, Kumar  Tata consultancy services

121 – A Novel Geometry-Based Algorithm for Robust Grasping in Extreme Clutter Environment
Kundu, Olyvia  TCS Innovation Labs
Swagat, Kumar  Tata consultancy services

140 – Fatigue Estimation Using Facial Expression Features and Remote-PPG Signal
Hasegawa, Masaki  Toyohashi University of Technology
Hayashi, Kotaro  Toyohashi University of Technology
Miura, Jun  Toyohashi University of Technology

160 – Model & Feature Agnostic Eye-In-Hand Visual Servoing Using Deep Reinforcement Learning with Prioritized Experience Reply
Singh, Prerna  Tata Consultancy Services
Singh, Virender  TCS
Dutta, Samrat  TCS Research and Innovation
Swagat, Kumar  Tata consultancy services

173 – Reasoning on Shared Visual Perspective to Improve Route Directions
Waldhart, Jules  LAAS-CNRS
Clodic, Aurélie  LAAS - CNRS
Alami, Rachid  CNRS

Regular Session 13: Machine Learning and Adaptation

155, 176, 190, 202, 209, 215

155 – HiFi: A Hierarchical Framework for Incremental Learning Using Deep Feature Representation
Raj, Ankita  IIT Delhi
Majumder, Anima  Tata consultancy services
Swagat, Kumar  Tata consultancy services

176 – Reinforcement Learning Motion Planning for an EOG-Centered Robot Assisted Navigation in a Virtual Environment
Garrote, Luís Carlos  Institute of Systems and Robotics
Perdiz, João  University of Coimbra
Pires, Gabriel  University of Coimbra
Nunes, Urbano J.  Instituto de Sistemas e Robotica

190 – Identifying Multiple Interaction Events from Tactile Data During Robot-Human Object Transfer
Davari, Mohammad-Javad  Simon Fraser University
Hegedus, Michael James  Simon Fraser University
Gupta, Kamal  Simon Fraser University
mehrandezh, mehran  University of Regina

202 – Designing Child-Robot Interaction with Robotito
Ewelina, Bakała  Facultad de Ingeniería, University of the Republic, Montevideo
Visca, Jorge  Facultad de Ingeniería, University of the Republic, Montevideo
Tejera López, Gonzalo Daniel  University of the Republic, Facultad de Ingeniería
209 – An Empirical Study of Person Re-Identification with Attributes
Shree, Vikram  
Chao, Wei-Lun  
Campbell, Mark  
Cornell University

215 – Q-Learning Based Navigation of a Quadrotor Using Non-Singular Terminal Sliding Mode Control
Yogi, Subhash Chand  
Tripathi, Vibhu Kumar  
Kamath, Archit Krishna  
Behera, Laxmidhar  
Indian Institute of Technology Kanpur

Regular Session 14: Imitation Learning

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152 – SMAK-Net: Self Supervised Multi-Level Spatial Attention Network for Knowledge Representation towards Imitation Learning
Ramachandruni, Kartik  
Vankadari, Madhu Babu  
Majumder, Anima  
Dutta, Samrat  
Swagat, Kumar  
TCS Innovation Labs  
TCS  
Tata consultancy services  
TCS Research and Innovation  
Tata consultancy services

243 – Extending Policy from One-Shot Learning through Coaching
Balakuntala Srinivasa Murthy, Mythra Varun  
Venkatesh, L.N Vishnunandan  
Padmakumar Bindu, Jyothsna  
Voyles, Richard  
Wachs, Juan  
Purdue University  
Purdue University  
Purdue University  
Purdue University  
Purdue University

245 – DeepMoTion: Learning to Navigate Like Humans
Hamandi, Mahmoud  
D'Arcy, Michael  
Fazli, Pooyan  
INSA Toulouse  
North-western University  
San Francisco State University

252 – Learning Active Spine Behaviors for Dynamic and Efficient Locomotion in Quadruped Robots
Bhattacharya, Shounak  
Indian Institute of Science
266 – Trajectory based Deep Policy Search for Quadrupedal Walking
Nadubettu Yadukumar, Shishir
Indian Institute of Science
Joglekar, Ashish
Indian Institute of Science
Shetty, Suhan
Indian Institute of Science
Dholakiya, Dhaivat
Indian Institute of Science
Singh, Abhimanyu
BITS Pilani K K Birla Goa Campus
Ghosal, Ashitava
India Institute of Science (IISc)
Amrutur, Bharadwaj
Indian Institute of Science

300 - Natural Language Interface for Programming Sensory-Enabled Scenarios for Human-Robot Interaction
Buchina, Nina
Eindhoven University of Techniligy
Sterkenburg, Paula
Free University of Amsterdam
Lourens, Tino
TiViPE
Barakova, Emilia I.
Eindhoven University of Technology

Regular Session 15: Motion Planning, Navigation, and Control in Human Centered Environment

264, 288, 148, 219, 171, 217

264 – PIVO: Probabilistic Inverse Velocity Obstacle for Navigation under Uncertainty
Poonganam, SriSai Naga Jyotish
IIIT Hyderabad
Goel, Yash
IIIT Hyderabad
Avula, Venkata Seetharama
IIIT Hyderabad
Sai Bhargav Kumar
IIIT Hyderabad
Krishna, Madhava
IIIT Hyderabad

288 – Trajectory Advancement during Human-Robot Collaboration
Tirupachuri, Yeshasvi
Italian Institute of Technology
Nava, Gabriele
Italian Institute of Technology
148 – Vision-Based Fast-Terminal Sliding Mode Super Twisting Controller for Autonomous Landing of a Quadrotor on a Static Platform
Kamath, Archit Krishna
Tripathi, Vibhu Kumar
Yogi, Subhash Chand
Behera, Laxmidhar
Indian Institute of Technology, Kanpur

219 – Vision-Based Fractional Order Sliding Mode Control for Autonomous Vehicle Tracking by a Quadrotor UAV
Maurya, Heera Lal
Kamath, Archit Krishna
Behera, Laxmidhar
Verma, Nishchal K.
Indian Institute of Technology, Kanpur

171 – End-User Programming of Low and High-Level Actions for Robotic Task Planning
Liang, Ying Siu
Pellier, Damien
Fiorino, Humbert
Pesty, Sylvie
University of Grenoble-Alpes
Laboratory of Informatics Grenoble - CNRS
University Grenoble Alpes laboratory of Informatics Grenoble
University of Grenoble-Alps

217 – Human Perception of Gait Styles on a Compass Walker in Variable Contexts Via Descriptive versus Emotive Labels
Lambert, Jacey
Huzaifa, Umer
Rizvi, Wali
LaViers, Amy
University of Illinois at Urbana-Champaign
University of Illinois at Urbana-Champaign
University of Illinois at Urbana Champaign
University of Illinois at Urbana-Champaign

Regular Session 16: Medical Robotics
30, 58, 123, 267, 179, 102

30 – Master-Slave Guidewire and Catheter Robotic System for Cardiovascular Intervention
Xiang, Yujia
Shen, Hao
Xie, Le
Wang, Hesheng
Shanghai Jiao Tong University
Shanghai Jiao Tong University
Shanghai Jiao Tong University
Shanghai Jiao Tong University
58 – A Brief Review of the Electronics, Control System Architecture, and Human Interface for Commercial Lower Limb Medical Exoskeletons Stabilized by Aid of Crutches
Tabti, Nahla University of Paris Sud
KARDOFAKI, Mohamad UVSQ
Alfayad, Samer LISV,BIA
Chitour, Yacine University of Paris Sud
Ben Ouezdou, Fathi University of Versailles St. Quentin

123 – Development of a Foldable Five-Finger Robotic Hand for Assisting Laparoscopic Surgery
Anzai, Yuki Yokohama National University
Sagara, Yuto Yokohama National University
Kato, Ryu Yokohama National University
Mukai, Masaya Tokai University

267 – Effects of Flexible Surgery Robot on Endoscopic Procedure: Preliminary Bench-Top User Test
Kim, Joonhwan Korea Advanced Institute of Science and Technology (KAIST)
Hwang, Minho Korea Advanced Institute of Science and Technology (KAIST)
Lee, Dong-Ho Korea Advanced Institute of Science and Technology
Kim, Hansoul Korea Advanced Institute of Science and Technology
Ahn, Jeongdo Korea Advanced Institute of Science and Technology
You, Jae Min Korea Advanced Institute of Science and Technology
Baek, DongHoon KAIST
Kwon, Dong-Soo KAIST

179 – Towards Securing the Sclera against Patient Involuntary Head Movement in Robotic Retinal Surgery
Ebrahimi, Ali Johns Hopkins University
Urias, Muller Wilmer Eye Institute
He, Changyan Beihang University
Patel, Niravkumar Johns Hopkins University
Taylor, Russell H. Johns Hopkins University
Gehlbach, Peter Johns Hopkins Medical Institute
Iordachita, Ioan Iulian Johns Hopkins University

102 – Detecting Deception in HRI Using Minimally-Invasive and Noninvasive Techniques
Iacob, David-Octavian ENSTA-ParisTech
Tapus, Adriana ENSTA-ParisTech
138 – Can a Humanoid Robot Be Part of the Organizational Workforce? a User Study

Leveraging Sentiment Analysis

Mishra, Nidhi 
Ramanathan, Manoj 
Satapathy, Ranjan 
Cambria, Erik 
Thalmann, Nadia Magnenat 

Nanyang Technological University

150 – A Multi Modal People Tracker for Real Time Human Robot Interaction

Wengefeld, Tim 
Mueller, Steffen 
Lewandowski, Benjamin 
Gross, Horst-Michael 

Ilmenau University of Technology

151 – Human Prediction for the Natural Instruction of Handovers in Human Robot Collaboration

Lambrecht, Jens 
Nimpsch, Sebastian 

Technical University of Berlin 
GESTALT Robotics GmbH

170 – Evaluation of an Industrial Robotic Assistant in an Ecological Environment

Busch, Baptiste 
Cotugno, Giuseppe 
Khoramshahi, Mahdi 
Skaltsas, Grigorios 
Turchi, Dario 
Urbano, Leonardo 
Waechter, Mirko 
Zhou, You 
Asfour, Tamim 
Deacon, Graham 
Russell, Duncan 
Billard, Aude 

EPFL 
King's College London 
EPFL 
University of Hertfordshire 
Ocado 
EPFL 
Karlsruhe Institute of Technology (KIT) 
Karlsruhe Institute of Technology (KIT) 
OCADO - Robotics Research 
Ocado Technology 
EPFL

207 – Human Trust after Robot Mistakes: Study of the Effects of Different Forms of Robot Communication

Ye, Sean 
Neville, Glen 
Schrum, Mariah 
Gombolay, Matthew 

Georgia Institute of Technology 
Georgia Institute of Technology 
Georgia Institute of Technology 
Georgia Institute of Technology
Chernova, Sonia  Georgia Institute of Technology
Howard, Ayanna  Georgia Institute of Technology

211 – Path Planning through Tight Spaces for Payload Transportation Using Multiple Mobile Manipulators
Tallamraju, Rahul  IIIT Hyderabad
Sripada, Venkatesh  Oregon State University, Corvallis, USA
Shah, Suril Vijaykumar  Indian Institute of Technology Jodhpur

Regular Session 18: Linguistic Communication and Dialogue

16, 40, 86, 97, 186, 25

16 – Autonomous Generation of Robust and Focused Explanations for Robot Policies
Struckmeier, Oliver  Aalto University
Racca, Mattia  Aalto University
Kyrki, Ville  Aalto University

40 – A Robots Expressive Language Affects Human Strategy and Perceptions in a Competitive Game
Roth, Aaron M.  Carnegie Mellon University
Reig, Samantha  Carnegie Mellon University
Bhatt, Umang  Carnegie Mellon University
Shulgach, Jonathan  Carnegie Mellon University
Amin, Tamara  Independent
Doryab, Afsaneh  Carnegie Mellon University
Fang, Fei  Carnegie Mellon University
Veloso, Manuela  Carnegie Mellon University

86 – Walk the Talk! Exploring (Mis)Alignment of Words and Deeds by Robotic Teammates in a Public Goods Game
Correia, Filipa  INESC-ID and Instituto Superior Tecnico
Chandra, Shruti  INESC-ID and Instituto Superior Tecnico
Mascarenhas, Samuel  INESC-ID / Instituto Superior Tecnico
Charles-Nicolas, Julien  Tecnico Lisboa
Gally, Justin Philippe Roger Luc  INSA Lyon
Lopes, Diana  Instituto Superior Tecnico
Santos, Fernando P.  Princeton University
Santos, Francisco C.  IST, Universidade de Lisboa, Portugal
Melo, Francisco S.  Instituto Superior Tecnico
Paiva, Ana  INESC-ID and Instituto Superior Tecnico
97 – Your instruction may be crisp, but not clear to me!
Pramanick, Pradip \hspace{1cm} TCS Research & Innovation
Sarkar, Chayan \hspace{1cm} TCS Research & Innovation
Bhattacharya, Indrajit \hspace{1cm} TCS Research & Innovation

186 – Building Language-Agnostic Grounded Language Learning Systems
Kery, Caroline \hspace{1cm} University of Maryland, Baltimore County
Pillai, Nisha \hspace{1cm} UMBC
Matuszek, Cynthia \hspace{1cm} University of Maryland, Baltimore County
Ferraro, Francis \hspace{1cm} University of Maryland Baltimore County

25 – Let Me Show You Your New Home: Studying the Effect of Proxemic-Awareness of Robots on Users' First Impressions
Petra, Björn \hspace{1cm} Augsburg University
Weitz, Katharina \hspace{1cm} Augsburg University
Aslan, Ilhan \hspace{1cm} Augsburg University
Andre, Elisabeth \hspace{1cm} Augsburg University

Regular Session 19: Robot Companions

115, 231, 240, 17, 194, 27

115 – An Adaptive Robot Teacher Boosts a Human Partner's Learning Performance in Joint Action
Vignolo, Alessia \hspace{1cm} Istituto Italiano di Tecnologia
Powell, Henry \hspace{1cm} University of Glasgow
McEllin, Luke \hspace{1cm} Central European University
Rea, Francesco \hspace{1cm} Istituto Italiano di Tecnologia
Sciutti, Alessandra \hspace{1cm} Italian Institute of Technology
Michael, John \hspace{1cm} Central European University

231 – On the Role of Trust in Child-Robot Interaction
Zguda, Paulina \hspace{1cm} Jagiellonian University
Kolota, Anna \hspace{1cm} Jagiellonian University
Jarosz, Mateusz \hspace{1cm} AGH University of Science and Technology
Sondej, Filip \hspace{1cm} AGH University of Science and Technology
Izui, Takamune \hspace{1cm} Tokyo University of Agriculture and Technology
Dziok, Maria \hspace{1cm} AGH University of Science and Technology
Belowska, Anna \hspace{1cm} AGH University of Science and Technology
Wojciech Jedras \hspace{1cm} AGH University of Science
Venture, Gentiane \hspace{1cm} Tokyo University of Agriculture and Technology
Sniezynski, Bartlomiej \hspace{1cm} AGH University of Science and Technology
Indurkhya, Bipin \hspace{1cm} Jagiellonian University
240 – An Exploratory Study on Proxemics Preferences of Humans in Accordance with Attributes of Service Robots
Samarakoon, Bhagya University of Moratuwa
Muthugala Arachchige Singapore University of Technology and Design
Viraj Jagathpriya Muthugala Singapore University of Technology and Design
Jayasekara, A.G.B.P. University of Moratuwa
Elara, Mohan Rajesh Singapore University of Technology and Design

17 – Augmented Reality as a Medium for Human-Robot Collaborative Tasks
Chacko, Sonia NYU Tandon School of Engineering
Kapila, Vikram NYU Tandon School of Engineering

194 – Designing a Socially Assistive Robot for Long-Term In-Home Use for Children with Autism Spectrum Disorders
Pakkar, Roxanna University of Southern California
Clabaugh, Caitlyn University of Southern California
Lee, Rhianna University of Southern California
Deng, Eric University of Southern California
Mataric, Maja University of Southern California

27 – Proof of Concept of a Projection-Based Safety System for Human-Robot Collaborative Engine Assembly
Hietanen, Antti Eerikki Tampere University of Technology
Changizi, Alireza Tampere University of Technology
Lanz, Minna Tampere University of Technology
Kamarainen, Joni-Kristian Tampere University of Technology
GANGULY, PALLAB Tampere University
Pieters, Roel S. Tampere University
Latokartano, Jyrki Matias Tampere University of Technology

Regular Session 20: Therapy and Rehabilitation
246, 270, 253, 67, 153, 293

246 – Linear Parameter-Varying Identification of the EMG–Force Relationship of the Human Arm
PESENTI, Mattia Politecnico di Mil
ALKHOURY, Ziad University of Strasbourg
BEDNARCYK, Maciej University of Strasbourg
OMRAN, Hassan University of Strasbourg
Bayle, Bernard University of Strasbourg
270 – Co-Designing and Field-Testing Adaptable Robots for Triggering Positive Social Interactions for Adolescents with Cerebral Palsy
Mariager, Casper Sloth Aalborg University
Fischer, Daniel K. B. Aalborg University
Kristiansen, Jakob Aalborg University
Rehm, Matthias Aalborg University

253 – Socially Assistive Robot’s Behaviors Using Microservices
Ercolano, Giovanni University of Naples Federico II
Lambiase, Paolo D. University of Naples Federico II
Leone, Enrico University of Naples "Federico II
Raggioli, Luca University of Naples Federico II
Trepiccione, Davide University of Naples Federico II
Rossi, Silvia University of Naples Federico II

67 – A Robot-Mediated Assessment of Tinetti Balance scale for Sarcopenia Evaluation in Frail Elderly
Fiorini, Laura The BioRobotics Institute, Scuola Superiore Sant'Anna
D'Onofrio, Grazia Complex Unit of Geriatrics, IRC
Rovini, Erika Scuola Superiore Sant'Anna, Pisa
Sorrentino, Alessandra Scuola Superiore Sant'Anna
Coviello, Luigi Scuola Superiore Sant'Anna
Limosani, Raffaele Scuola Superiore Sant'Anna
Sancarlo, Daniele Complex Unit of Geriatrics, IRC
Cavallo, Filippo Scuola Superiore Sant'Anna – Pisa

Oliver, Joan Instituto de Robótica para la Dependencia
Olíván, Rebeca Instituto de Robótica para la Dependencia
Shukla, Jainendra Indraprastha Institute of Information Technology, Delhi
Folch, Annabel Intellectual Disability and Developmental Disorders Research Uni
Martínez-Leal, Rafael Intellectual Disability and Developmental Disorders Research Uni
Castellà, Mireia Intellectual Disability and Developmental Disorders Research Uni
Puig, Domenec Rovira i Virgili University

293 – SHEBA: A Low-Cost Assistive Robot for Older Adults in the Developing World
Motahar, Tamanna North South University
Farden, Fahim North South University
Sarkar, Dibya Prokash North South University
Islam, Atiqul North South University
Cabrera, Maria Eugenia University of Washington
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81 – Learning by Collaborative Teaching : An Engaging Multi-Party CoWriter Activity
El Hamamsy, Laila EPFL
JOHAL, Wafa EPFL
asselborn, thibault EPFL
Nasir, Jauwairia EPFL
Dillenbourg, Pierre EPFL

82 – Trajectory Optimization of Continuum Arm Robots
Yadav, Ritesh BITS Pilani
Rout, Bijay Kumar Birla Institute of Technology and Science, Pilani, India

1 - Playful Interaction with Humanoid Robots for Social Development in Autistic Children: A Pilot Study
Cervera, Enric Jaume-I University
del Pobil, Angel P. Jaume-I University
Cabezudo, Maria-Isabel Hospital de Manises

309 - Formulating User Requirements for Designing Collaborative Robots
Macovetchi, Ana Maria Blue Ocean Robotics
Shahabeddini Parizi, Mohammad Blue Ocean Robotics
Kirstein, Franziska Blue Ocean Robotics

15 - Dark-Room Exchange: Human Supervision of Decentralized Multi-Robot Systems Using Distributed Ledgers and Network Mapping
Krishnamoorthy, Sai-Prasanth NYU Tandon School of Engineering
Go, Albert Massachusetts Institute of Technology
Tiwari, Ashlee Indian Institute of Technology, Kanpur
Kapila, Vikram NYU Tandon School of Engineering

29 - Communicating with SanTO the First Catholic Robot
Trovato, Gabriele Waseda University
Pariasca, Franco Pontificia Universidad Catolica del Peru
Ramirez, Renzo Pontificia Universidad Católica del Perú
Cerna, Javier Pontificia Universidad Catolica del Peru
Reutskiy, Vadim Innopolis University
Rodriguez, Laureano Pontificia Universidad Católica del Perú
Cuellar, Francisco Pontificia Universidad Catolica del Peru
37 - Quantitative Evaluation of Clothing Assistance Using Whole-Body Robotic Simulator of the Elderly
Joshi, Ravi Prakash  Graduate School of Life Science and Systems Engineering, Kyushu
Shibata, Tomohiro  Kyushu institute of technology
Ogata, Kunihiro  National Institute of Advanced Industrial Science and Technology
Matsumoto, Yoshio  AIST

42 - Impression Change on Nonverbal Non-Humanoid Robot by Interaction with Humanoid Robot
Ueno, Azumi  Tokyo University of Agriculture and Technology
Mizuuchi, Ikuo  Tokyo University of Agriculture and Technology
Hayashi, Kotaro  Toyohashi University of Technology

43 - MobiKa - Low-Cost Mobile Robot for Human-Robot Interaction
Graf, Florenz  Fraunhofer IPA
Odabasi, cagatay  Fraunhofer IPA
Jacobs, Theo  Fraunhofer IPA
Graf, Birgit  Fraunhofer IPA
Födisch, Thomas  BruderhausDiakonie

59 - Design and Evaluation of Expressive Turn-Taking Hardware for a Tele-presence Robot
Fitter, Naomi T.  University of Southern California
Joung, Youngseok  University of Southern California
Demeter, Marton  University of Southern California
Hu, Zijian  University of Southern California
Mataric, Maja  University of Southern California

98 – Study of Empathy on Robot Expression Based on Emotion Estimated from Facial Expression and Biological Signals
Sripian, Peeraya  Shibaura Institute of Technology
Kurono, Yuya  Shibaura Institute of Technology
Yoshida, Reiji  Shibaura Institute of Technology
Sugaya, Midori  Shibaura Institute of Technology

76 - Does a Friendly Robot Make You Feel Better?
Ruijten, Peter  Eindhoven University of Technology
Cuijpers, Raymond  Eindhoven University of Technology

83 - Brand Recognition with Partial Visible Image in the Bottle Random Picking Task Based on Inception V3
ZHU, Chen  Waseda University
Matsumaru, Takafumi  Waseda University
103 - A Conditional Adversarial Network for Scene Flow Estimation
Thakur, Ravi Kumar Indian Institute of Information Technology Sri City, Chittoor
Mukherjee, Snehasis Indian Institute of Information Technology Sri City, Chittoor

105 - Evaluating Imitation of Human Eye Contact and Blinking Behavior using an Android for Human-like Communication
Tetsuya, Sano Nara Institute of Science and Technology
Yuguchi, Akishige Nara Institute of Science and Technology
Garcia Ricardez, Gustavo Alfonso Nara Institute of Science and Technology (NAIST)
Takamatsu, Jun Nara Institute of Science and Technology
Nakazawa, Atsushi Kyoto University
Ogasawara, Tsukasa Nara Institute of Science and Technology

110 - Deep-Pack: A Vision-Based 2D Online Bin Packing Algorithm with Deep Reinforcement Learning
Kundu, Olyvia TCS Innovation Labs
Dutta, Samrat TCS Research and Innovation
Swagat, Kumar Tata consultancy services

117 - Collaborative Transportation of Cable-Suspended Payload Using Two Quadcopter with Human in the Loop
Prajapati, Pratik Indian Institute of Technology Gandhinagar
Parekh, Sagar Institute of Technology, Nirma University
Vashista, Vineet Indian Institute of Technology Gandhinagar

118 - Effective Human-Robot Collaboration in Near Symmetry Collision Scenarios
Da Silva Filho, José Grimaldo University Grenoble Alpes - INRIA
Olivier, Anne-Hélène University Rennes, M2S Lab, Inria, MimeTIC
Crétual, Armel M2S Lab, University Rennes 2
Petre, Julien INRIA - IRISA
Fraichard, Thierry INRIA

119 - Establishing Human-Robot Trust through Music-Driven Robotic Emotion Prosody and Gesture
Savery, Richard Georgia Inst. of Technology
Weinberg, Gil Georgia Inst. of Technology
Rose, Ryan Georgia Inst. of Technology

124 - Effectiveness of Robot Communication Level on Likeability, Understandability and Comfortability
Chatterji, Nupur Georgia Institute of Technology
Allen, Courtney Georgia Institute of Technology
Chernova, Sonia Georgia Institute of Technology
136 - Trip Recommendation Robot Agent
Matsui, Tetsuya Seikei university
Yamada, Seiji National Institute of Informatics

142 - Tracking Control Incorporating Friction Estimation of a Cleaning Robot with a Scrubbing Brush
Nemoto, Takuma Singapore University of Technology and Design
Mohan, Rajesh Elara Singapore University of Technology and Design

147 - Evaluation of Robots That Signals a Pedestrian Using Face Orientation Based on Moving Trajectory Analysis
Yamashita, Shohei Hiroshima City University
Ikeda, Tetsushi Hiroshima City University
Shinozawa, Kazuhiko Advanced Telecommunications Research Institute
Iwaki, Satoshi Hiroshima City University

154 - Augmented Robotics for Learners: A Case Study on Optics
JOHAL, Wafa EPFL
Robu, Olguta EPFL
Dame, Amaury Oxford University
Magnenat, Stéphane EPFL
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174 - Incremental Estimation of Users Expertise Level
Carreno, Pamela University of Waterloo
Dahiya, Abhinav University of Waterloo
Smith, Stephen L. University of Waterloo
Kulic, Dana University of Waterloo

177 - Autonomous Chess Playing Robot
Nath, Prasanmit NIT Rourkela
Rath, Prabin Kumar NIT Rourkela
Mahapatro, Neelam NIT Rourkela

185 - Human-Robot Team: Effects of Communication in Analyzing Trust
Ciocirlan, Stefan-Dan University Politehnica of Bucharest
Agrigoroae, Roxana ENSTA-ParisTech
Tapus, Adriana ENSTA-ParisTech

197 - Probabilistic Obstacle Avoidance and Object Following: An Overlap of Gaussians Approach
Bhatt, Dhaivat IIIT-Hyderabad
Garg, Akash Delhi Technological University
199 - Improving Robot Tutoring Interactions through Help-Seeking Behaviors
Jordan, Kristin University of Southern California
Pakkar, Roxanna University of Southern California
Mataric, Maja University of Southern California

201 - Coupling of Arm Movements during Human-Robot Interaction: The Handover Case
Ferreira Duarte, Nuno Instituto Superior Técnico, Lisbon
Rakovic, Mirko University of Novi Sad, Faculty of Technical Sciences
Santos-Victor, José Instituto Superior Técnico – Lisbon

208 - Towards Situational Awareness from Robotic Group Motion
Levillain, Florent Ensadlab-Reflective Interaction
St-Onge, David Ecole de Technologie Superieure
Beltrame, Giovanni Ecole Polytechnique de Montreal
Zibetti, Elisabetta CHART-LUTIN

216 - Analysis of Factors Influencing the Impression of Speaker Individuality in Android Robots
Mikata, Ryusuke ATR
Ishi, Carlos Toshinori ATR
Minato, Takashi ATR
Ishiguro, Hiroshi Osaka University

225 - Synthesizing Unnatural Grasping in Humanoid Robots Using Fuzzy Logic
Dayal, Udai, Arun Birla Institute of Technology
Biswas, Shiladitya Birla Institute of Technology
Penisetty, Sree Aslesh Birla Institute of Technology, Mesra, Ranchi

230 - Classroom Group Formation Model Based on Socion Theory Considering Communication in Social Networking Services
Naito, Kosuke Nagoya Institute of Technology
Kato, Shohei Nagoya Institute of Technology

232 - Design of an Integrated Gripper with a Suction System for Grasping in Cluttered Environment
Kang, Long Hanyang University
Seo, Jong-Tae Hanyang University
Kim, Sang-Hwa Hanyang University
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234 - A Robust Position Estimation Algorithm under Unusual Large Range Errors
Kim, Moonki       Korean Institute of Science and Technology
Lee, Ji Yang       Korean Institute of Science and Technology
Kim, Jung-Hee     Korea Institute of Science and Technology
Hassen, Nigatu     Korean Institute of Science and Technology
Kim, Doik          KIST

236 - Factors Influencing the Human Preferred Interaction Distance
Rajamohan, vineeth  University of Nevada, Reno
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Dascalu, sergiu    University of Nevada, Reno
Feil-Seifer, David  University of Nevada, Reno

241 - Perception of Social Intelligence in Robots Performing False-Belief Tasks
Sturgeon, Stephanie  University of Nevada, Reno
Palmer, Andrew       University of Nevada, Reno
Blankenburg, Janelle University of Nevada, Reno
Feil-Seifer, David   University of Nevada, Reno

247 - Dynamic Calibration between a Mobile Robot and SLAM Device for Navigation
Ishikawa, Ryoichi    The University of Tokyo
Oishi, Takeshi       The University of Tokyo
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282 - Development of a Teach Pendant for Humanoid Robotics with Cartesian and Joint-Space Control Modalities
Otarbay, Zhenis      Nazarbayev University
Assylgali, Iliyas    Nazarbayev University
Yskak, Asset        Nazarbayev University
Folgheraiter, Michele Nazarbayev University

289 - Influencing Hand-Washing Behavior with a Social Robot: HRI Study with School Children in Rural India
Deshmukh, Amol       University of Glasgow
K Babu, Sooraj       AMMACHI Labs, Amrita Vishwa Vidyapeetham, Amritapuri, India
Radhakrishnan, Unnikrishnan Amrita University
Ramesh, Shanker      AMMACHI Labs, Amrita Vishwa Vidyapeetham, Amritapuri, India
A, Parameswari      Ammachis labs, Amrita Vishwa Vidyapeetham, Amritapuri, India
Rao R, Bhavani       Amrita Vishwa vidyapeetham University

305 - Aggressive Bee: A New Vision for Missile Guidance Applications
Jada, Chakravarthi   RGUKT-NUZVID
Urlana, Ashok        RGUKT-NUZVID
306 - Chasing and Aiming of a Moving Target
Agarwal, Suryansh IIT Kanpur
Hanchinal, Suraj Veerabhadra IIT Kanpur
Chaudhary, Ashok Kumar IIT Kanpur
Behera, Laxmidhar IIT Kanpur

307 - Investigations on Gesture Holding Durations at Speech Interruptions in Dialogue Robots
Ishi, Carlos Toshinori ATR
Mikata, Ryusuke ATR
Minato, Takashi ATR
Ishiguro, Hiroshi Osaka University

308 – Human-Robot Handovers with Signal Temporal Logic Specifications
Kshirsagar, Alap Cornell University
Kress-Gazit, Hadas Cornell University
Hoffman, Guy Cornell University

310 – Development and Performance Evaluation of Onboard Auto-Pilot System for an Aerial Vehicle
Kumar, Abhinay IIT Jodhpur
Comandur, Venkatesan IIT-Jodhpur

312 – A Body Contact-Driven Pupil Response Pet-Robot for Enhancing Familiarity
Sejima, Yoshihiro Kansai University
Kawamoto, Hiroki Okayama Prefectural University
Sato, Yoichiro Okayama Prefectural University
Watanabe, Tomio Okayama Prefectural University

313 – Development of a Finger Rehabilitation System Considering Motion Sense and Vision Based on Mirror Therapy
Ota, Shunsuke University of Toyama
JINDAI, Mitsuru University of Toyama
Yasuda, Toshiyuki University of Toyama

314 - Extended Hybrid Code Network for Hospital Receptionist Robot
Hwang, Eui Jun The University of Auckland
Ahn, Byeong-Kyu Sungkyunkwan University
MacDonald, Bruce University of Auckland
Ahn, Ho Seok The University of Auckland, Auckland
315 – Investigating the Understandability and Efficiency of Directional Cues in Robot Navigation
Neggers, Margot  Eindhoven University of Technology
Ruijten, Peter  Eindhoven University of Technology
Cuijpers, Raymond  Eindhoven University of Technology
IJsselsteijn, Wijnand  Eindhoven University of Technology

316 - Multi-Robot Formation Control Using Reinforcement Learning
Rawat, Abhay  International Institute of Information Technology, Hyderabad
Karlapalem, Kamalakar  IIIT-Hyderabad

317 – A Pilot Study for a Robot-Mediated Listening Comprehension Intervention for Children with ASD
Louie, Wing-Yue Geoffrey  Oakland University
ABBAS, Ibrahim  Oakland University
Korneder, Jessica  Oakland University

318 – Contextual Non-Verbal Behaviour Generation for Humanoid Robot Using Text Sentiment
Deshmukh, Amol  University of Glasgow
Foster, Mary Ellen  University of Glasgow
Mazel, Alexandre  Aldebaran-Robotics

319 - Towards Automatic Synthesis and Instantiation of Proactive Behavior
Buyukgoz, Sera  Soft-Bank Robotics Europe, Sorbonne University
Chetouani, Mohamed  Sorbonne University
Pandey, Amit Kumar  Hanson Robotics

320 - An Agent Model Introducing Interpersonal Sentiments for Enhancement of Friendliness
Fukuta, Kazuaki  Nagoya Institute of Technology
Kato, Shohei  Nagoya Institute of Technology