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Faculty of Information Science and Electrical Engineering, Kyushu University
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<http://robotics.ait.kyushu-u.ac.jp/~kurazume/index-e.html>

EDUCATION

Tokyo Institute of Technology, Japan 12/31/1998
Ph.D. Department of Mechanical Engineering Science
"Study on Cooperative Positioning System"

Tokyo Institute of Technology, Japan 4/1/1989-3/31/1991
M.Eng. Department of Mechanical Engineering Science
"Motion Control of Free Flying Robot with Dual-Arms"

WORK HISTORY

Vice Dean, Faculty of Information Science and Electrical Engineering, Kyushu University 4/1/2024-

Vice Dean, Faculty of Information Science and Electrical Engineering, Kyushu University 4/1/2016-3/31/2018

Professor, Faculty of Information Science and Electrical Engineering, Kyushu University 4/1/2007-PRESENT

Associate Professor, Faculty of Information Science and Electrical Engineering, Kyushu University 4/1/2002-3/31/2007

Research Scientist, Institute of Industrial Science, University of Tokyo 10/1/2000-3/31/2002

Research Associate, Department of Mechanical Engineering Science Tokyo Institute of Technology 1/1/1995-9/30/2000

Researcher Fujitsu Laboratories LTD 4/1/1991-12/31/1994

SOCIETIES and ACTIVITIES

The Robotics Society of Japan 1989-PRESENT
The Japan Society of Mechanical Engineers 1995-PRESENT

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|---|--------------|
| The Information Processing Society of Japan | 2001-PRESENT |
| The Society of Instrument and Control Engineers | 2004-PRESENT |
| The Institute of Electronics, Information and Communication Engineers | 2006-PRESENT |
| IEEE-RAS | 2006-PRESENT |

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| Chairman of the Robotics and Mechatronics Division, The Japan Society of Mechanical Engineers (JSME) | 4/1/2019- 3/31/2020 |
| Vice Chairman of the Robotics and Mechatronics Division, The Japan Society of Mechanical Engineers (JSME) | 4/1/2018-3/31/2019 |
| Director of the Robotics Society of Japan (RSJ) | 4/1/2013-3/31/2015 |
| Director of the Society of Instrument and Control Engineers (SICE) | 4/1/2013-3/31/2015 |
| Director of the Robotics Society of Japan (RSJ) | 4/1/2009-3/31/2011 |

Editorial and Administrative activities

Associate Editor IROS 07, ICRA 08, ICRA 09, ICRA 10, ICRA 11, AIM 12, IROS 13, IROS 22, IROS 23, IROS 24

Senior Program Committee IRO S22, IROS 23

Editor SII 12, IROS 17, Advanced Robotics

Reviewer ICRA 07, IROS 07, IROS 08, ICRA 09, IROS 09, ICRA 10, IROS 10, IROS 11, ICRA 12, AIM 12, IROS 12, SII 12, ICRA 13, ICRA 14, AIM 2014, IROS 14, ICRA 15, IROS15, SII 15, ICRA 16, IROS 16, ICRA 17, ICRA 21, IROS 22, IROS 23, SMC 23, T-RO, RA-L, Advanced Robotics

Publicity chair IROS 19

Treasure chair SII 12

e-Media chair IROS 22

AWARDS and HONORS

| | |
|---|------------|
| SICE System Integration Division System Integration Certificate Merit /for Outstanding Contribution | 12/17/2021 |
| JSME Robotics and Mechatronics Division Robotics and Mechatronics Award | 6/7/2021 |
| Fellow of SICE | 9/12/2019 |
| JSME Robotics and Mechatronics Division, Certificate of Merit for ROBOMECH Outstanding Research Activity | 6/6/2019 |
| JSME Education Award | 4/18/2019 |
| IEEE Senior Member | 12/28/2018 |
| Fellow of JSME | 2/18/2018 |
| SICE System Integration Division Academic Achievement Award | 12/21/2017 |
| Finalist of Best Service Robotics Paper Award, ICRA 2017 | 6/1/2017 |
| Fellow of RSJ | 9/8/2016 |
| SICE System Integration Division Research Award | 12/15/2015 |
| EST 2014 Best Paper in the Machine Vision Workshop | 9/11/2014 |
| RSJ Best Paper Award | 9/5/2014 |

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| 14th Symposium on Construction Robotics in Japan Best Paper Award | 8/28/2014 |
| JSME Robotics and Mechatronics Academic Achievement Award | 5/28/2012 |
| Best Paper Award Candidate in Robotics Symposia | 3/15/2010 |
| IEEE ROBIO T.J.Tarn Best Paper in Robotics | 12/14/2010 |
| EST 2010 Best Paper Award | 9/6/2010 |
| JSME Robotics and Mechatronics Division, Certificate of Merit for ROBOMECH Outstanding Research Activity | 5/25/2009 |
| RSJ Service Award | 9/10/2008 |
| RSJ Best Paper Award | 11/12/1993 |
| JSME Hatakeyama Award | 1989 |

GRANT

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|---|-----------|
| PWRI SIP (Cross-ministerial Strategic Innovation Promotion Program) Public Work Research Institute Core Cooperative Researcher | 2023- |
| Moonshot R&D Program Japan Society for the Promotion of Science Core Cooperative Researcher | 2021-2027 |
| Grant-in-Aid for Scientific Research (A) Japan Society for the Promotion of Science Principal Investigator | 2020-2025 |
| NEDO SIP (Cross-ministerial Strategic Innovation Promotion Program) New Energy and Industrial Technology Development Organization Core Cooperative Researcher | 2018-2022 |
| JST CREST (Core Research for Evolutionary Science and Technology) Japan Society for the Promotion of Science Core Cooperative Researcher | 2017-2021 |
| JST CREST (Core Research for Evolutionary Science and Technology) Japan Society for the Promotion of Science Cooperative Researcher | 2017-2019 |
| Grant-in-Aid for Scientific Research (C) Japan Society for the Promotion of Science Cooperative Researcher | 2016-2018 |
| Grant-in-Aid for Challenging Exploratory Research Japan Society for the Promotion of Science Principal Investigator | 2016-2017 |
| Grant-in-Aid for Scientific Research (A) Japan Society for the Promotion of Science Principal Investigator | 2014-2017 |

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| Grant-in-Aid for Challenging Exploratory Research Japan Society for the Promotion of Science Cooperative Researcher | 2014-2015 |
| Grant-in-Aid for Challenging Exploratory Research Japan Society for the Promotion of Science Principal Investigator | 2014-2015 |
| COI-STREAM (Center of Innovation Science and Technology based Radical Innovation and Entrepreneurship Program) Ministry of Education, Culture, Sports, Science and Technology Researcher | 2013-2021 |
| Grant-in-Aid for Challenging Exploratory Research Japan Society for the Promotion of Science Principal Investigator | 2012-2013 |
| Strategic Information and Communications R&D Promotion Programme Ministry of Internal Affairs and Communications Researcher | 2012-2015 |
| Grant-in-Aid for Scientific Research (B) Japan Society for the Promotion of Science Principal Investigator | 2011-2013 |
| Grant-in-Aid for Scientific Research (B) Japan Society for the Promotion of Science Principal Investigator | 2010-2012 |
| A-Step (Adaptable and Seamless Technology Transfer Program through Target-driven R&D Japan Science and Technology Agency Principal Investigator | 2010-2010 |
| Grant-in-Aid for Scientific Research Investigation Japan Society for the Promotion of Science Principal Investigator | 2009-2010 |
| Grant-in-Aid for Research on Construction Technology Ministry of Land, Infrastructure, Transport and Tourism Principal Investigator | 2009-2010 |
| Project to Develop "Innovative Seeds" Japan Science and Technology Agency Principal Investigator | 2008-2008 |
| Project for Future Generation Robots | 2007-2012 |

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|--|-----------|
| New Energy and Industrial Technology Development Organization Researcher | |
| Project for Intelligent Medical Robots New Energy and Industrial Technology Development Organization Researcher | 2007-2010 |
| Grant-in-Aid for Scientific Research (B) Japan Society for the Promotion of Science Principal Investigator | 2007-2009 |
| Strategic Development of Advanced Robotics Elemental Technologies New Energy and Industrial Technology Development Organization Researcher | 2006-2008 |
| Grant-in-Aid for Scientific Research (B) Japan Society for the Promotion of Science Researcher | 2006-2008 |
| Grant-in-Aid for Research and Development Fukuoka Industry, Science and Technology Foundation Principal Investigator | 2006-2006 |
| Grant-in-Aid for Scientific Research (A) Japan Society for the Promotion of Science Researcher | 2005-2008 |
| Special Coordination Funds for Promoting Science and Technology, Ministry of Education, Culture, Sports, Science and Technology Researcher | 2005-2007 |
| Grant-in-Aid for Young Scientists (B), Japan Society for the Promotion of Science Principal Investigator | 2004-2005 |
| Strategic Information and Communications R&D Promotion Programme, Ministry of Internal Affairs and Communications Researcher | 2003-2005 |
| Grant-in-Aid for Scientific Research (A), Japan Society for the Promotion of Science Researcher | 2002-2004 |
| Grant-in-Aid for Young Scientists , Japan Society for the Promotion of Science Principal Investigator | 1998-1999 |
| Grant-in-Aid for Young Scientists, | 1996-1996 |

Japan Society for the Promotion of Science
Principal Investigator

PUBLICATIONS

International Journals (57 papers)

RGB-based Gait Recognition with Disentangled Gait Feature Swapping
Koki Yoshino, Kazuto Nakashima, Jeongho Ahn, Yumi Iwashita, Ryo Kurazume
IEEE Access, Vol., No., pp., DOI:10.1109/ACCESS.2024.3445415, 2024

Isomorphic mesh generation from point clouds with multilayer perceptrons
Shoko Miyauchi, Ken'ichi Morooka, Ryo Kurazume
IEEE Transactions on Visualization and Computer Graphics, Vol., No., pp.1-18,
DOI:10.1109/TVCG.2024.3367855, 2024

Learning Viewpoint-Invariant Features for LiDAR-Based Gait Recognition
Jeongho Ahn, Kazuto Nakashima, Koki Yoshino, Yumi Iwashita, Ryo Kurazume
IEEE Access, vol. 11, pp. 129749-129762, doi: 10.1109/ACCESS.2023.3333037, 2023

Augmented reality-based affective training for improving care communication skill and empathy
Atsushi Nakazawa, Miyuki Iwamoto, Ryo Kurazume, Masato Nunoi, Masaki Kobayashi, Miwako Honda
PLOS ONE, Vol.18, No.7, e0288175, 2023, DOI:10.1371/journal.pone.0288175

Teleoperation by Seamless Transitions in Real and Virtual World Environments
Junki Aoki, Fumihiko Sasaki, Ryota Yamashina, Ryo Kurazume
Robotics and Autonomous Systems, Vol.164, pp.104405, 2023, DOI:10.1016/j.robot.2023.104405

The effect of communication skills training for nursing students by augmented reality simulation system
Masaki Kobayashi, Miyuki Iwamoto, Saki Une, Ryo Kurazume, Atsushi Nakazawa, Miwako Honda
Innovation in Aging, Volume 6, Issue Supplement_1, November 2022, Page 440,
DOI:10.1093/geroni/igac059.1725

Simulated communication skills training program effects using augmented reality with real-time feedback: A randomized control study
Masaki Kobayashi, Miyuki Iwamoto, Saki Une, Ryo Kurazume, Atsushi Nakazawa, Miwako Honda
Alzheimer's and Dementia, Vol.18, No.S8, 2022, DOI:10.1002/alz.062055

Artificial intelligence for segmentation of bladder tumor cystoscopic images performed by U-Net with dilated convolution
Jun Mutaguchi, Ken'ichi Morooka, Satoshi Kobayashi, Aiko Umehara, Shoko Miyauchi, Fumio Kinoshita, Junichi Inokuchi, Yoshinao Oda, Ryo Kurazume, Masatoshi Eto
Journal of Endourology, Vol.36, No.6, 2022, DOI:10.1089/end.2021.0483

Development of ROS2-TMS: New Software Platform for Informationally Structured Environment
Tomoya Itsuka, Minsoo Song, Akihiro Kawamura, and Ryo Kurazume
ROBOMECH Journal, Vol. , No. , 2022, DOI:

Development of AR training systems for Humanitude dementia care
Ryo Kurazume, Tomoki Hiramatsu, Masaya Kamei, Daiji Inoue, Akihiro Kawamura, Shoko Miyauchi, and Qi An
Advanced Robotics, Vol., pp.-, 2021, DOI:10.1080/01691864.2021.2017342

Classification of Motor Impairments of Post-stroke Patients based on Force Applied to a Handrail
Qi An, Ningjia Yang, Hiroshi Yamakawa, Hiroki Kogami, Kazunori Yoshida, Ruoxi Wang, Atsushi Yamashita, Hajime Asama, Shu Ishiguro, Shingo Shimoda, Hiroshi Yamasaki, Moeka Yokoyama, Fady Alnajjar, Noriaki Hattori, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Ryo Kurazume
IEEE Transactions on Neural Systems and Rehabilitation Engineering, Vol.29, pp.2399-2406, 2021, DOI:10.1109/TNSRE.2021.3127504

Speed Invariant Gait Recognition – The Enhanced Mutual Subspace Method
Yumi Iwashita, Hitoshi Sakano, Ryo Kurazume, Adrian Stoica
PLOS ONE, Vol.16, No.8, pp.1-21, 2021, DOI:10.1371/journal.pone.0255927

Modelling of Hyper-adaptability: from motor coordination to rehabilitation
Harry Eberle, Yoshikatsu Hayashi, Ryo Kurazume, Tomohiko Takei, Qi An
Advanced Robotics, Vol.35, No.13-14, 2021, DOI:10.1080/01691864.2021.1943710

Development of a Tour Guide and Co-experience Robot System using the Quasi-Zenith Satellite System and the 5th-Generation Mobile Communication System at a Theme Park
Kohei Matsumoto, Hiroyuki Yamada, Masato Imai, Akihiro Kawamura, Yasuhiro Kawauchi, Tamaki Nakamura, Ryo Kurazume
ROBOMECH Journal, Vol.8, No.4, 2021, DOI:10.1186/s40648-021-00192-7

Near-future perception system: Previewed Reality
Asuka Egashira, Yuta Horikawa, Takuma Hayashi, Akihiro Kawamura, and Ryo Kurazume
Advanced Robotics, Vol.35, No.1, pp.19-30, 2021, DOI:10.1080/01691864.2020.1829041

Virtual IR Sensing for Planetary Rovers: Improved Terrain Classification and Thermal Inertia Estimation
Yumi Iwashita, Kazuto Nakashima, Joseph Gatto, Shoya Higa, Norris Khoo, Ryo Kurazume, Adrian Stoica
IEEE Robotics and Automation Letters, Vol. 5, Issue 4, pp. 6302-6309, 2020

Lifelogging caption generation via fourth-person vision in a human-robot symbiotic environment
Kazuto Nakashima, Yumi Iwashita, and Ryo Kurazume
ROBOMECH Journal, Vol., No., pp., 2020, DOI:

Gait-based Person Identification using 3D LiDAR and Long Short-term Memory Deep Networks
Hiroyuki Yamada, Jeongho Ahn, Oscar Martinez Mozos, Yumi Iwashita, and Ryo Kurazume
Advanced Robotics, Vol., No., pp., 2020, DOI:10.1080/01691864.2020.1793812

First-person video analysis for evaluating skill level in the Humanitude tender-care technique
Atsushi Nakazawa, Yuki Mitsuzumi, Yuki Watanabe, Ryo Kurazume, Sakiko Yoshikawa, Miwako Honda

Journal of Intelligent & Robotic Systems, Vol.98, No.1, pp.103-118, 2020, DOI:10.1007/s10846-019-01052-8

Spatial change detection using normal distributions transform

Ukyo Katsura, Kohei Matsumoto, Akihiro Kawamura, Tomohide Ishigami, Tsukasa Okada, and Ryo Kurazume

ROBOMECH Journal, Vol.6, Article number 20, 2019, DOI:10.1186/s40648-019-0148-8

3D Segmentation of Nasopharyngeal Carcinoma from CT Images Using Cascade Deep Learning

Bilel Daoud, Ken'ichi Morooka, Ryo Kurazume, Farhat Leila, Wafa Mnejja, Jamel Daoud

Computerized Medical Imaging and Graphics, Vol.77, No., pp., 2019, DOI:10.1016/j.compmedimag.2019.101644

First-person video analysis for evaluating skill level in the Humanitude tender-care technique

Atsushi Nakazawa, Yuki Mitsuzumi, Yuki Watanabe, Ryo Kurazume, Sakiko Yoshikawa, Miwako Honda

Journal of Intelligent & Robotic Systems, Vol., No., 2019, DOI:

Development of mobile sensor terminals "Portable Go" for navigation in informationally structured and unstructured environments

Yuuta Watanabe, Akio Shigekane, Kohei Matsumoto, Akihiro Kawamura, Ryo Kurazume

ROBOMECH Journal, Vol.6, No.6, 2019, DOI:10.1186/s40648-019-0134-1

Fukuoka Datasets for Place Categorization

Oscar Martinez Mozos, Kazuto Nakashima, Hojung Jung, Yumi Iwashita, Ryo Kurazume

International Journal of Robotics Research, 2019

Development of ROS-TMS 5.0 for Informationally Structured Environment

Junya Sakamoto, Kouhei Kiyoyama, Kohei Matsumoto, Yoonseok Pyo, Akihiro Kawamura, Ryo Kurazume

ROBOMECH Journal, Vol.5, No.24, 2018, DOI: 10.1186/s40648-018-0123-9

Ancient Pelvis Reconstruction From Collapsed Component Bones Using Statistical Shape Models

Ken'ichi Morooka, Ryota Matsubara, Shoko Miyuchi, Takaichi Fukuda, Takeshi Sugii, Ryo Kurazume

Machine Vision and Applications, 2018, DOI: 10.1007/s00138-018-0972-5

Learning Geometric and Photometric Features from Panoramic LiDAR scans for Outdoor Place Categorization

Kazuto Nakashima, Hojung Jung, Yuki Oto, Yumi Iwashita, Ryo Kurazume, Oscar Martinez Mozos
Advanced Robotics, Volume 32, Issue 14, pp.750-765, 2018, doi:10.1080/01691864.2018.1501279

Fast modified Self-organizing Deformable Model: Geometrical feature-preserving mapping of organ models onto target surfaces with various shapes and topologies

Shoko Miyauchi, Ken'ichi Morooka, Tokuo Tsuji, Yasushi Miyagi, Takaichi Fukuda, Ryo Kurazume
Computer Methods and Programs in Biomedicine, Vol.157, pp.237--250, 2018

Automatic large-scale three dimensional modeling using cooperative multiple robots

Ryo Kurazume, Souichiro Oshima, Shingo Nagakura, Yongjin Jeong, Yumi Iwashita
Computer Vision and Image Understanding, Vol. 157, pp. 25--42, April 2017

Local N-ary Patterns: a local multi-modal descriptor for place categorization

Hojung Jung, Oscar Martinez Mozos, Yumi Iwashita, Ryo Kurazume
Advanced Robotics, Vol. 30, No. 6, pp. 402--415, 2016, doi:10.1080/01691864.2015.1120242

Service Robot System with an Informationally Structured Environment

Yoonseok Pyo, Kouhei Nakashima, Shunya Kuwahata, Ryo Kurazume, Tokuo Tsuji, Ken'ichi Morooka, Tsutomu Hasegawa

Robotics and Autonomous Systems, Vol.74, No.Part A, pp. 148--165, 2015, doi:10.1016/j.robot.2015.07.010

The Informationally Structured Room for Robotic Assistance

Tokuo Tsuji, Oscar Martinez Mozos, Hyunuk Chae, YoonSeok Pyo, Kazuya Kusaka, Tsutomu Hasegawa, Ken'ichi Morooka, Ryo Kurazume

Sensors, Vol.15, No.4, pp.9438--9465, 2015, doi:10.3390/s150409438

Manual/Automatic Colorization for Three-Dimensional Geometric Models utilizing Laser Reflectivity

Shuji Oishi, Ryo Kurazume

Advanced Robotics, Vol.28, No.24, pp.1617--1635, 2014, doi:10.1080/01691864.2014.968616

Identification of people walking along curved trajectories

Yumi Iwashita, Koichi Ogawara, Ryo Kurazume

Pattern Recognition Letters, Vol.48, No.15, pp.60--69, 2014, doi:10.1016/j.patrec.2014.04.004

Floor Sensing System using Laser Reflectivity for Localizing Everyday Objects and Robot

Yoonseok Pyo, Tsutomu Hasegawa, Tokuo Tsuji, Ryo Kurazume, Ken'ichi Morooka

Sensors, Vol.14, No.4, pp. 7524--7540, 2014, doi:10.3390/s140407524

Gait-based person identification robust to changes in appearance

Yumi Iwashita, Koji Uchino, Ryo Kurazume

Sensors, Vol.13, No.6, pp.7884--7901, 2013, doi:10.3390/s130607884

Categorization of Indoor Places by Combining Local Binary Pattern Histograms of Range and Reflectance Data from Laser Range Finders

Oscar Martinez Mozos, Hitoshi Mizutani, Hojung Jung, Ryo Kurazume, Tsutomu Hasegawa

Advanced Robotics, Vol.27, No.18, pp.1455--1464, 2013

Range Image Smoothing and Completion utilizing Laser Intensity
Shuji Oishi, Ryo Kurazume, Yumi Iwashita, Tsutomu Hasegawa
Advanced Robotics, Vol.27, No.12, pp.947--958, 2013

Robust Visual Servoing for Object Manipulation against Temporary Loss of Sensory Information
using a Multi-Fingered Hand-Arm
Akihiro Kawamura, Kenji Tahara, Ryo Kurazume, Tsutomu Hasegawa
Journal of Robotics and Mechatronics, Vol.25, No.1, pp.125--135, 2013

Robust global localization using laser reflectivity
Dong Xiang ZHANG, Ryo Kurazume, Yumi Iwashita, Tsutomu Hasegawa
Journal of Robotics and Mechatronics, Vol.25, No.1, pp.38--52, 2013

Dynamic Grasping of an Arbitrary Polyhedral Object
Akihiro Kawamura, Kenji Tahara, Ryo Kurazume, Tsutomu Hasegawa
Robotica, Vol.31, No.4, pp. 511--523, 2013

Development of 3D scanning system using automatic guiding total station
Ken Endou, Takafumi Ikenoya, Ryo Kurazume
Journal of Robotics and Mechatronics, Vol.24, No.6, pp.992--999, 2012

Gait identification using shadow biometrics
Yumi Iwashita, Adrian Stoica, Ryo Kurazume
Pattern Recognition Letters, Vol.33, No.16, pp.2148--2155, 2012

Categorization of Indoor Places Using the Kinect Sensor
Oscar Martinez Mozos, Hitoshi Mizutani, Ryo Kurazume, Tsutomu Hasegawa
Sensors, Vol.12, No.5, pp.6695--6711, 2012

Laser-based geometrical modeling of large-scale architectural structures using co-operative multiple
robots
Yukihiro Tobata, Ryo Kurazume, Yusuke Noda, Kai Lingemann, Yumi Iwashita, Tsutomu Hasegawa
Autonomous Robot, Vol.32, No.1, pp. 49--62, 2012

HELIOS Tracked Robot Team: Mobile RT System for Special Urban Search and Rescue Operations
Ryuichi Hodoshima, Michele Guarnieri, Ryo Kurazume, Hiroshi Masuda, Takao Inoh, Paulo
Debenest, Edwardo F. Fukushima, Shigeo Hirose
Journal of Robotics and Mechatronics, Vol.23, No.6, pp.1041--1054, 2011

Multi-Part People Detection Using 2D Range Data
Oscar Martinez Mozos, Ryo Kurazume, Tsutomu Hasegawa
International Journal of Social Robotics, Vol.2, No.1, pp.31--40, 2010

A Decision Method for Placement of Tactile Elements on a Sensor Glove for the Recognition of
Grasp Types
Kouji Murakami, Kazuya Matsuo, Tsutomu Hasegawa, and Ryo Kurazume
IEEE/ASME Transactions on Mechatronics, Vol.15, No.1, pp.157--162, 2010

Supporting Robotic Activities in Informationally Structured Environment with Distributed Sensors and RFID Tags

Kouji Murakami, Tsutomu Hasegawa, Ryo Kurazume, and Yoshihiko Kimuro
Journal of Robotics and Mechatronics, Vol.21, No.4, pp.453--459, 2009

3D reconstruction of a femoral shape using a parametric model and two 2D fluoroscopic images
Ryo Kurazume, Kaori Nakamura, Toshiyuki Okada, Yoshinobu Sato, Nobuhiko Sugano, Tsuyoshi Koyama, Yumi Iwashita, Tsutomu Hasegawa

Computer Vision and Image Understanding, Vol.113, No.2, pp. 202--211, 2009

Hierarchical face cluster partitioning of polygonal surfaces and high-speed rendering

Tokuo Tsuji, Hongbin Zha, Tsutomu Hasegawa, Ryo Kurazume
Systems and Computers in Japan, Vol.38, No.8, pp.32--43, 2007

Fast Model-Image Registration using 2D Distance Map for Surgical Navigation System

Yumi Iwashita, Ryo Kurazume, Kozo Konishi, Masahiko Nakamoto, Naoki Aburaya, Yoshinobu Sato, Makoto Hashizume, Tsutomu Hasegawa
Advanced Robotics, Vol.21, No.7, pp751--770, 2007

The Great Buddha Project: Digitally Archiving, Restoring, and Analyzing Cultural Heritage Objects

Katsushi Ikeuchi, Takeshi Oishi, Jun Takamatsu, Ryusuke Sagawa, Atsushi Nakazawa, Ryo Kurazume, No Nishino, Mawo Kamakura
International Journal of Computer Vision, Vol.75, No.1, pp.189--208, 2007

A New Index of Serial Link Manipulator Performance Combining Dynamic Manipulability and Manipulating Force Ellipsoids

Ryo Kurazume, Tsutomu Hasegawa
IEEE Transactions on Robotics, Vol.22, No.5, pp.1022--1028, 2006

Mapping textures on 3D geometric model using reflectance image

Ryo Kurazume, Ko Nishino, Mark D. Wheeler, Katsushi Ikeuchi
Systems and Computers in Japan, Vol.36, No.13, pp.92--101, 2005

Feedforward and feedback dynamic trot gait control for quadruped walking vehicle

Ryo Kurazume, Kan Yoneda, and Shigeo Hirose
Autonomous Robots, Vol.12, No.2, pp.157--172, 2002

Development of a Cleaning Robot System with Cooperative Positioning System

Ryo Kurazume, Shigeo Hirose
Autonomous Robots, Vol.9, No.3, pp. 237--246, 2000

An Experimental Study of a Cooperative Positioning System

Ryo Kurazume, Shigeo Hirose
Autonomous Robots, Vol.8, No.1, pp. 43--52, 2000

Domestic Journals in Japan (54 papers)

Selected Refereed Conference Papers (15 papers out of 197 papers)

Environmental and Behavioral Imitation for Autonomous Navigation

Junki Aoki, Fumihiro Sasaki, Kohei Matsumoto, Ryota Yamashina, and Ryo Kurazume

2024 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Abu Dhabi, 2024.10.14-18, pp., 2024, doi:

Indoor Position Estimation Using NLoS Reflect Path by Wireless Distance Sensors

Tomoya Itsuka and Ryo Kurazume

2024 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Abu Dhabi, 2024.10.14-18, pp., 2024, doi:

Crowd-Aware Robot Navigation with Switching Between Learning-Based and Rule-Based Methods Using Normalizing Flows

Kohei Matsumoto, Yuki Hyodo, and Ryo Kurazume

2024 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Abu Dhabi, 2024.10.14-18, pp., 2024, doi:

LiDAR Data Synthesis with Denoising Diffusion Probabilistic Models

Kazuto Nakashima and Ryo Kurazume

IEEE International Conference on Robotics and Automation (ICRA 2024), pp. , doi:, 2024.5.13-17, 2024

Development of dementia care training system based on augmented reality and whole body wearable tactile sensor

Tomoki Hiramatsu, Masaya Kamei, Daiji Inoue, Akihiro Kawamura, An Qi, Ryo Kurazume, 2020 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2020), Las Vegas, USA, 2020.10.25-29, 2020

Spatial change detection using voxel classification by normal distributions transform

Ukyou Katsura, Kohei Matsumoto, Akihiro Kawamura, Tomohide Ishigami, Tsukasa Okada, Ryo Kurazume

IEEE International Conference on Robotics and Automation 2019 (ICRA 2019), Montreal, Canada, 2019.5.20-24, 2019

Previewed Reality: Near-future perception system

Yuta Horikawa, Asuka Egashira, Kazuto Nakashima, Akihiro Kawamura, Ryo Kurazume

2017 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2017), pp.370-375, 2017

Feasibility study of IoRT platform "Big Sensor Box"

Ryo Kurazume, Yoonseok Pyo, Tokuo Tsuji, and Akihiro Kawamura

Proc. IEEE International Conference on Robotics and Automation (ICRA2017), 2017

Multi-modal Panoramic 3D Outdoor Datasets for Place Categorization

Hojung Jung, Yuki Oto, Oscar Mozos, Yumi Iwashita, Ryo Kurazume

Proc. of IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2016), pp.4545-4550, 2016

Automatic planning of laser measurements for a large-scale environment using CPS-SLAM system
Souichiro Oshima, Shingo Nagakura, Yongjin Jeong, Yumi Iwashita, Ryo Kurazume
Proc. of IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2015),
pp.4437-4444, 2015

Grasp Stability Evaluation based on Energy Tolerance in Potential Field
Tokuo Tsuji, Kosei Baba, Kenji Tahara, Kensuke Harada, Ken'ichi Morooka, Ryo Kurazume
Proc. of IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2015),
pp.2311-2316, 2015

Grasp Planning for Constricted Parts of Objects Approximated with Quadric Surfaces
Tokuo Tsuji, Soichiro Uto, Kensuke Harada, Ryo Kurazume, Tsutomu Hasegawa, Ken'ichi Morooka
2014 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2014), pp.2447-
2453, 2014

Iterative Learning Control for a Musculoskeletal Arm: Utilizing Multiple Space Variables to Improve
the Robustness
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COOPERATIVE RESEARCHS

2024- KYOCERACorporation
2023- SGIMIZU Corporation
2022- KYUDENKO Corporation

| | |
|-----------|---|
| 2021- | Advanced Telecommunications Research Institute International(ATR) |
| 2021- | Sony Semiconductor Solutions |
| 2021- | Hitachi, Ltd. |
| 2021- | OREC CO., LTD. |
| 2019- | Ricoh Co., Ltd. |
| 2019 | Japan Manned Space Systems Corporation (JAMSS) |
| 2018-2019 | NTT DOCOMO, INC. |
| 2018-2020 | Living robot Inc. |
| 2017 | hapi-robo st, Inc. |
| 2016-2019 | JATCO Ltd. |
| 2015-2019 | Panasonic Inc. |
| 2015 | KOBE STEEL LTD. |
| 2013-2015 | YASKAWA Electric Corporation |
| 2011-2013 | SEIBU Landscape Co. LTD. |
| 2011-2012 | Hitachi, Ltd. |
| 2010 | Systems Engineering Consultants Co., LTD. |
| 2010-2012 | Mitsubishi Electric Corporation |
| 2009-2010 | TOKYU CONSTRUCTION CO., LTD. |

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