

Masatoshi Ishikawa - Activities
2025

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1. CV & Awards (Affiliation / CV / Speciality / Awards)



Tokyo University of Science

Home Page YouTube Facebook X Instagram LinkedIn LINE



Laboratory (En:English, Ja:Japanese)

Home Page YouTube Facebook Facebook



En

En

En

Ja

En

Ja

Personal

Affiliation

Tokyo University of Science
 President / Professor
 1-3 Kagurazaka, Shinjuku-ku, Tokyo 113-8601, JAPAN
 E-Mail
 E-Mail:ishikawa@ishikawa-vision.org

Curriculum Vitae

- 2023.4 **Professor**, Research Institute for Science and Technology, Tokyo University of Science^{*1}
- 2022.1 **President**, Tokyo University of Science^{*1,*2,*3}
- 2020.4 **Project Professor**, Data Science Division, Information Technology Center, the University of Tokyo^{*4} (until March 2023)
- 2019.4 **Professor**, Department of Information Physics and Computing, Graduate School of Information Science and Technology, the University of Tokyo^{*5,*7} (until March 2020)
- 2016.4 **Dean**, Graduate School of Information Science and Technology, the University of Tokyo^{*5,*6,*7} (until March 2020)
- 2005.4 **Professor**, Department of Creative Informatics, Graduate School of Information Science and Technology, the University of Tokyo^{*6,*7} (until March 2020)
- **Executive Vice-President**, the University of Tokyo^{*5,*6,*7,*8,*9} (until March 2006)
- 2004.4 **Vice-President**, the University of Tokyo^{*6,*7,*8} (until March 2005)
- 2002.4 **Executive Advisor to the President**, the University of Tokyo^{*6,*7,*10} (until March 2004)
- 2001.4 **Professor**, Department of Information Physics and Computing, Graduate School of Information Science and Technology, the University of Tokyo^{*7}
- 1999.4 **Professor**, Department of Mathematical Engineering and Information Physics, Graduate School of Engineering, the University of Tokyo^{*7}
- 1995.4 **Associate Professor**, Department of Mathematical Engineering and Information Physics, Graduate School of Engineering, the University of Tokyo^{*11}
- 1989.6 **Associate Professor**, Department of Mathematical Engineering and Information Physics, Faculty of Engineering, the University of Tokyo^{*12,*13}
- 1987.4 **Senior Researcher**, Industrial Products Research Institute, Agency of Industrial Science and Technology^{*14}
- 1979.4 **Researcher**, Industrial Products Research Institute, Agency of Industrial Science and Technology^{*14}
- 1988.2 **Dr. of Engineering**, the University of Tokyo
- 1979.3 Completed Master Course of Department of Mathematical Engineering and Information Physics, Graduate School of Engineering, the University of Tokyo
- 1977.3 Graduated Department of Mathematical Engineering and Information Physics, Faculty of Engineering, the University of Tokyo

Concurrent position: ^{*1}: President, Tokyo University of Science, ^{*2}: Professor, Research Institute for Science and Technology, Tokyo University of Science from 2023.4, ^{*3}: Project Professor, Data Science Division, Information Technology Center, the University of Tokyo until 2023.3, ^{*4}: President, Tokyo University of Science, from 2022.1, ^{*5}: Professor, Department of Creative Informatics, Graduate School of Information Science and Technology, the University of Tokyo, ^{*6}: Professor, Department of Information Physics and Computing, Graduate School of Information Science and Technology, the University of Tokyo, ^{*7}: Professor, Department of Mathematical Engineering and Information Physics, Faculty of Engineering, the University of Tokyo, ^{*8}: Director, Division of University Corporate Relations, the University of Tokyo, ^{*9}: Director and Chief Information Officer, Division of University Information Systems, the University of Tokyo, ^{*10}: Director, Division of University Corporate Relations the University of Tokyo, from 2002.9, ^{*11}: Associate Professor, Department of Mathematical Engineering and Information Physics, Faculty of Engineering, the University of Tokyo, ^{*12}: Associate Professor, Department of Mathematical Engineering and Information Physics, Graduate School of Engineering, the University of Tokyo, ^{*13}: Senior Researcher, Industrial Products Research Institute, Agency of Industrial Science and Technology,

Present Name: ^{*14}: National Institute of Advanced Industrial Science and Technology

Speciality

Systems Informatics

Perception and Behavior Systems, Sensor Technology, Robotics, Image Processing, Bio-Information Systems

Sensor Fusion, Massively Parallel High-speed Vision, High-speed Intelligent Robots, Visual Feedback, Dynamic Interaction, Optics in Computing, Tactile Sensor, Circuit Model of Neural Network

** For other activities, please visit " Research "

Awards

Medal of Honor (Domestic) (1)

2011.11 Medal with Purple Ribbon, Japanese Government (Masatoshi Ishikawa)

Awards from Academic Society (Domestic) (23)

- 2020.10 Excellent Research and Technology Award, the Robotics Society of Japan (Keisuke Koyama, Makoto Shimojo, Taku Senoo, and Masatoshi Ishikawa)
- 9 Best Paper Award, the Virtual Reality Society of Japan (Takuya Kadowaki, Michika Maruyama, Tomohiko Hayakawa, Naoki Matsuzawa, Kenichiro Iwasaki, and Masatoshi Ishikawa)
- 2019. 6 Takagi Award, the Society of Image Sensing Technology (Yoshihiro Watanabe, Masahiro Yamada, and Masatoshi Ishikawa)
- 2018. 9 Best Paper Award, the Virtual Reality Society of Japan (Takatoshi Yoshida, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2017. 5 Niwa Takayanagi Best Paper Award, the Institute of Image Information and Television Engineers (Leo Miyashita, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2016. 9 Advanced Robotics Best Paper Award, the Robotics Society of Japan (Kohei Okumura, Keiko Yokoyama, Hiromasa Oku, and Masatoshi Ishikawa)
- 2015. 9 Best Paper Award, the Virtual Reality Society of Japan (Tomohiro Sueishi, Keisuke Hasegawa, Kohei Okumura, Hiromasa Oku, Hiroyuki Shinoda, and Masatoshi Ishikawa)
- 2014. 9 Best Paper Award and Hasunuma Award, the Society of Instrument and Control Engineers (Kohei Okumura, Masato Ishii, Eri Tatsumi, Hiromasa Oku, and Masatoshi Ishikawa)
- 4 Best Video Contents Award, the Institute of Image Information and Television Engineers (Kohei Okumura, Hiromasa Oku, and Masatoshi Ishikawa)
- 2013. 9 Best Paper Award, the Virtual Reality Society of Japan (Yoshihiro Watanabe, Takashi Komuro, and Masatoshi Ishikawa)
- - Best Paper Award, the Robotics Society of Japan (Kohei Okumura, Hiromasa Oku, and Masatoshi Ishikawa)
- 2 Award for Encouragement of Technology, the Japanese Society of Printing Science and Technology (Masahiro Yamada, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2011. 9 Best Paper Award, the Virtual Reality Society of Japan (Yoshihiro Watanabe, Alvaro Cassinelli, Takashi Komuro, and Masatoshi Ishikawa)
- 2010. 9 Best Paper Award, the Robotics Society of Japan (Hiromasa Oku, Takahiko Ishikawa, and Masatoshi Ishikawa)
- 8 Best Paper Award, the Society of Instrument and Control Engineers (Takaaki Nishino, Makoto Shimojo, and Masatoshi Ishikawa)
- 2008. 9 Best Paper Award, the Robotics Society of Japan (Yoshihiro Watanabe, Takashi Komuro, and Masatoshi Ishikawa)
- 2005. 3 Major Contribution Award in Integration of Opto-electronics, the Japan Society of Applied Physics (Izuo Hayashi Award) (Masatoshi Ishikawa)
- 2004. 8 Best Technique Award: Tomoda Award, the Society of Instrument and Control Engineers (Masatoshi Ishikawa, Takashi Komuro, Idaku Ishii, Atsushi Yoshida, Yoshiaki Inada, and Yasuhiro Komiya)
- 5 Best Development Award, the Institute of Image Information and Television Engineers (Intelligent Vision System Group [Hamamatsu Photonics, RIKEN, and the University of Tokyo, Leaders:Haruyoshi Toyoda, Yoshihiro Nakabo, and Masatoshi Ishikawa])
- 2001. 9 Best Paper Award, the Robotics Society of Japan (Akio Namiki, and Masatoshi Ishikawa)
- 1998. 9 Best Paper Award, the Robotics Society of Japan (Yoshihiro Nakabo, Idaku Ishii, and Masatoshi Ishikawa)
- 1990. 3 Best Optics Paper Award, the Optical Society of Japan, the Japan Society of Applied Physics (Masatoshi Ishikawa)
- 1984. 7 Best Paper Award, the Society of Instrument and Control Engineers (Masatoshi Ishikawa and Makoto Shimojo)

Awards from Domestic Organization except Academic Society (14)

- 2025. 3 Hirose Award, Hirose Foundation (Masatoshi Ishikawa)
- 2021. 4 Ichimura Prize in Science for Excellent Achievement Award, Ichimura Foundation for New Technology (Masatoshi Ishikawa)
- 1 Infrastructure Maintenance Award, Ministry of Land, Infrastructure, Transport and Tourism Award, Ministry of Land, Infrastructure, Transport and Tourism (University of Tokyo [Tomohiko Hayakawa, Yushi Moko, Himari Tochioka, and Masatoshi Ishikawa], Central Nippon Expressway Co., Ltd [Hiroyuki Kameoka, Yuichiro Fujita, and Yoshimasa Onishi])
- 2018. 5 Tateisi Prize, Grand Award, Tateisi Science and Technology Foundation (Masatoshi Ishikawa)
- 2013.12 Best Paper Award, FA Foundation (Kenji Suzuki, Yousuke Suzuki, Hiroai Hasegawa, Aigou Ming, Masatoshi Ishikawa, and Makoto Shimojo)
- 2012.11 Ericsson Telecommunications Award, Ericsson Japan K.K. (Masatoshi Ishikawa)
- 10 Houkou Award, the Hattori Houkou Foundation (Masatoshi Ishikawa)
- 2 Shimazu Award, the Shimazu Science and Technology Foundation (Masatoshi Ishikawa)
- 2010. 3 Best Paper Award, the FANUC FA and Robot Foundation (Makoto Shimojo, Takaaki Nishino, and Masatoshi Ishikawa)
- 2002. 5 IP Award (LSI IP Design Award), the Steering Committee of LSI IP Design Award (Masatoshi Ishikawa, Shingo Kagami, Takashi Komuro, and Idaku Ishii)
- 2000. 5 Best IP Award (LSI IP Design Award), the Steering Committee of LSI IP Design Award (Masatoshi Ishikawa, Takashi Komuro, Kazuya Ogawa, and Idaku Ishii)
- 1999.12 Kenjiro Sakurai Memorial Prize, the Optoelectronic Industry and Technology Development Association (Masatoshi Ishikawa)
- 1998. 3 Award for Progress in Advanced Automation Technology, the Foundation for Promotion of Advanced Automation Technology (Yoshihiro Nakabo, Idaku Ishii, and Masatoshi Ishikawa)
- 1988.11 Best Researcher Award, the Agency of Industrial Science and Technology (Masatoshi Ishikawa)

Awards to the Laboratory from Domestic Organization except Academic Society (12)

- 2021. 3 The 9th Robot Award, Excellent Prize, Ministry of Economy, Trade and Industry, Japan Machinery Federation, and related Ministries (University of Tokyo and Central Nippon Expressway Company Limited)

- 2020.11 Innovative Technologies 2020, Special Prize - Vision -, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Hayakawa Huang Sueishi Miyashita Laboratory)
- - Innovative Technologies 2020, Sponsor Award, Ministry of Economy, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Hayakawa Huang Sueishi Miyashita Laboratory)
- 2019.11 Innovative Technologies 2019, ACM SIGGRAPH Special Prize, Ministry of Economy, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Senoo Laboratory / Watanabe Laboratory, Tokyo Institute of Technology)
- - Innovative Technologies 2019, Sponsor Award, Ministry of Economy, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Senoo Laboratory / Watanabe Laboratory, Tokyo Institute of Technology)
- - Innovative Technologies 2019, Ministry of Economy, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Senoo Laboratory / Watanabe Laboratory, Tokyo Institute of Technology)
- 2015.12 Oe Ohama Award of 2015 Toretama, World Business Satellite, TV TOKYO (Ishikawa Watanabe Laboratory)
- 10 Innovative Technologies 2015, Ministry of Economy, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Watanabe Laboratory)
- 5 Best of Toretama Finalist, the commemorative 4000th Toretama, Toretama Award Selection Committee, World Business Satellite, TV TOKYO (Faculty of Engineering, The University of Tokyo)
- 2014.10 Innovative Technologies 2014, Ministry of Economy, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Watanabe Laboratory)
- 2013.10 Special Award of Innovative Technologies 2013 (Industry), Ministry of Economy, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Oku Laboratory)
- - Innovative Technologies 2013, Ministry of Economy, Trade and Industry, Japan and Digital Content Association of Japan (Ishikawa Oku Laboratory)

Awards from Division of Academic Society (Domestic) (15)

- 2024. 5 Best Magazine Paper Award, Communication Society, Institute of Electronics, Information and Communication Engineers (Leo Miyashita, Tomohiro Sueishi, Satoshi Tabata, Tomohiko Hayakawa, and Masatoshi Ishikawa)
- 2020. 5 Certificate of Merit for ROBOMECH Outstanding Research Activity, Division of Robotics and Mechatronics, the Japan Society of Mechanical Engineers (Keisuke Koyama, Makoto Shimojo, Taku Senoo, and Masatoshi Ishikawa)
- 2019.12 Award for Encouragement of Research, Technical Division of System Integration, the Society of Instrument and Control Engineers (Takuya Kadowaki, Tomohiko Hayakawa, and Masatoshi Ishikawa)
- 5 Certificate of Merit for ROBOMECH Outstanding Research Activity, Division of Robotics and Mechatronics, the Japan Society of Mechanical Engineers (Keisuke Koyama, Makoto Shimojo, Taku Senoo, and Masatoshi Ishikawa)
- 2018. 5 Certificate of Merit for ROBOMECH Outstanding Research Activity, Division of Robotics and Mechatronics, the Japan Society of Mechanical Engineers (Taku Senoo, Kennichi Murakami, and Masatoshi Ishikawa)
- 2016.12 Award for Encouragement of Research, Technical Division of System Integration, the Society of Instrument and Control Engineers (Taku Senoo, Masanori Koike, Kennichi Murakami, and Masatoshi Ishikawa)
- 2014. 9 Best Paper Award, Technical Division of Measurement, the Society of Instrument and Control Engineers (Kohei Okumura, Masato Ishii, Eri Tatsumi, Hiromasa Oku, and Masatoshi Ishikawa)
- 5 Certificate of Merit for ROBOMECH Outstanding Research Activity, Division of Robotics and Mechatronics, the Japan Society of Mechanical Engineers (Shohei Noguchi, Miho Tamei, Masahiro Yamada, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2013. 5 Certificate of Merit for ROBOMECH Outstanding Research Activity, Division of Robotics and Mechatronics, the Japan Society of Mechanical Engineers (Yuji Yamakawa, Akio Namiki, and Masatoshi Ishikawa)
- 2011.12 Award for Encouragement of Research, Technical Division of System Integration, the Society of Instrument and Control Engineers (Yuji Yamakawa, Akio Namiki, and Masatoshi Ishikawa)
- 2007. 5 Certificate of Merit for ROBOMECH Outstanding Research Activity, Division of Robotics and Mechatronics, the Japan Society of Mechanical Engineers (Noritsu Furukawa, Taku Senoo, Akio Namiki, and Masatoshi Ishikawa)
- 2005. 6 Certificate of Merit for ROBOMECH Outstanding Research Activity, Division of Robotics and Mechatronics, the Japan Society of Mechanical Engineers (Makoto Kaneko, Hie-Yong Jeong, Mitsuru Higashimori, Idaku Ishii, Akio Namiki, and Masatoshi Ishikawa)
- 2003.12 Award for Encouragement, Technical Division of System Integration, the Society of Instrument and Control Engineers (Akio Namiki, Yoshiro Imai, and Masatoshi Ishikawa)
- 5 Certificate of Merit for ROBOMECH Outstanding Research Activity, Division of Robotics and Mechatronics, the Japan Society of Mechanical Engineers (Makoto Shimojo, Ryota Makino, Hironori Ogawa, Takafumi Suzuki, Akio Namiki, Takashi Saito, Masatoshi Ishikawa, and Kunihiro Mabuchi)
- 1999. 6 Major Contribution Award, Division of Robotics and Mechatronics, Japan Society of Mechanical Engineers (Masatoshi Ishikawa)

Fellow and Honorary Member of Academic Society (Domestic) (7)

- 2025. 3 Fellow, Information Processing Society of Japan (Masatoshi Ishikawa)
- 2019. 6 Fellow, the Japan Federation of Engineering Societies (Masatoshi Ishikawa)
- 2014. 1 Fellow, the Japan Society of Mechanical Engineers (Masatoshi Ishikawa)
- 2012. 9 Fellow, the Institute of Electronics, Information and Communication Engineers (Masatoshi Ishikawa)
- 2010. 9 Fellow, the Robotics Society of Japan (Masatoshi Ishikawa)
- 1997. 7 Fellow, the Society of the Instrument and Control Engineers (Masatoshi Ishikawa)
- 2022. 9 Honorary Member, the Society of the Instrument and Control Engineers (Masatoshi Ishikawa)

Medal from International Academic Society (1)

- 2017.11 The Finkelstein Medal, Institute of Measurement and Control (InstMC) (Masatoshi Ishikawa)

Award from International Academic Society (1)

- 2024. 8 Distinguished Service Award (IMEKO) (Masatoshi Ishikawa)

Awards at International Conference (20)

- 2023. 9 SICE Annual Conference International Award (Application), SICE Annual Conference 2023 (SICE2023) (Himari Tochioka, Tomohiro Sueishi, and Masatoshi Ishikawa)
- 2022. 3 Best Poster Award Nomination, 2022 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW2022) (Ayumi Matsumoto, Tomohiro Sueishi, and Masatoshi Ishikawa)
- 2020. 1 Best Student Paper Award, 2020 IEEE/SICE Int. Symp. on System Integration (Mikihiro Ikura, Leo Miyashita, and Masatoshi Ishikawa)

- 2019.11 Best Demo Voted By Committee - Honorable Mentions (Emerging Technology), SIGGRAPH Asia 2019 (Ryo Ito, Leo Miyashita, and Masatoshi Ishikawa)
- 2018.12 Honorable Mentions (Paper), The 24th ACM Symposium on Virtual Reality Software and Technology (VRST2018) (Masashi Nitta, Tomohiro Sueishi, and Masatoshi Ishikawa)
- - Microsoft Award, The 24th ACM Symposium on Virtual Reality Software and Technology (VRST2018) (Masashi Nitta, Tomohiro Sueishi, and Masatoshi Ishikawa)
- 2016.12 T.J.Tarn Best Paper in Robotics Award, 2016 IEEE Int. Conf. on Robotics and Biomimetics (ROBIO 2016) (Taku Senoo, Yuuki Horiuchi, Yoshinobu Nakanishi, Kenichi Murakami, and Masatoshi Ishikawa)
- 2015.12 Best Paper Award, Int. Display Workshops (IDW '15) (Yoshihiro Watanabe, Gaku Narita, Sho Tatsuno, Takeshi Yuasa, Kiwamu Sumino, and Masatoshi Ishikawa)
- 10 Finalist of Best Student Paper Award, 2015 IEEE Int. Conf. on Robotics and Biomimetics (ROBIO 2015) (Kenichi Murakami, Yuji Yamakawa, Taku Senoo, and Masatoshi Ishikawa)
- 2014.10 Best Student Paper Award, 2014 Int. Conf. on Advanced Computer Science and Information Systems (Muhammad Sakti Alvissalim, Masahiko Yasui, Chihiro Watanabe, and Masatoshi Ishikawa)
- 3 Best Paper Award, Winter Conference on the Applications of Computer Vision (Shohei Noguchi, Masahiro Yamada, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- - Honorable Mention, 5th Augmented Human International Conference (Takehiro Niikura, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2012.10 Best IROS Jubilee Video Award, IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (Masatoshi Ishikawa, Akio Namiki, Taku Senoo, and Yuji Yamakawa)
- 2011. 6 Best Presentation Award, 42nd IEEE VAIL Computer Elements Workshop (Masatoshi Ishikawa)
- 2007.10 Best Paper Nomination Finalist, IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (Makoto Shimojo, Takuma Araki, Aiguo Ming, and Masatoshi Ishikawa)
- 2006.12 Best Paper in Biomimetics, IEEE Int. Conf. on Robotics and Biomimetics (Anchelee Davies, Naoko Ogawa, Hiromasa Oku, Koichi Hashimoto, and Masatoshi Ishikawa)
- 5 Best Manipulation Paper Award, IEEE Int. Conf. on Robotics and Automation (Noritsu Furukawa, Akio Namiki, Taku Senoo, and Masatoshi Ishikawa)
- 2004. 4 Best Vision Paper Award Finalist, IEEE Int. Conf. on Robotics and Automation (Yoshiro Imai, Akio Namiki, Koichi Hashimoto, and Masatoshi Ishikawa)
- 2003. 9 Excellent Paper Award, 6th Japan-France Congress on Mechatronics & 4th Asia-Europe Congress on Mechatronics (Makoto Shimojo, Ryota Makino, Hironori Ogawa, Takafumi Suzuki, Akio Namiki, Takashi Saito, Masanori Kunitomo, Masatoshi Ishikawa, and Kunihiro Mabuchi)
- 1996. 4 Best Video Award Finalist, IEEE Int. Conf. on Robotics and Automation (Yoshihiro Nakabo, Idaku Ishii, and Masatoshi Ishikawa)

Awards from International Academic Council (13)

IEEE Sensors Council, Most Accessed/Cited Articles (Makoto Shimojo, Akio Namiki, Masatoshi Ishikawa, Ryota Makino, and Kunihiro Mabuchi)

IEEE Sensors Council, 50 Most Accessed Articles

2017 May No.41, Apr. No.35, Mar. No.50
 2016 Dec. No.32, Nov. No.16, Oct. No.21, Sep.No.49
 2014 Oct. No.10, Sep. No.37

IEEE Sensors Council, Most Cited from All Time by April 2014

2014 Apr. No.8

IEEE Sensors Council, 25 Most Accessed Articles

2014 Apr. No.22
 2012 Jun. No.10 Apr. No.15

Awards to the Laboratory at International Conference (2)

- 2011. 4 Le Grand Prix du Jury, 13th Int. Conf. on Virtual Reality (Laval Virtual) (Ishikawa Komuro Laboratory)
- 2009. 4 Best Project in the Category of Medicine and Health, 11th Int. Conf. on Virtual Reality (Laval Virtual) (Ishikawa Komuro Laboratory)

Awards from International Organization except Academic Society (1)

- 2010.10 Nissan Research Challenge Innovative Concept Award, Nissan Research Center (Carson Reynolds, Alvaro Cassinelli, Yoshihiro Watanabe, Masatoshi Ishikawa, Tomoko Hayashi, Isao Kanemaki, Takehiro Goto, Takashi Asari, Yuichi Nakamura, Koutaro Furukawa)

Awards at Domestic Conference (42)

- 2020. 3 Interactive Presentation Award (Recommendation by PC), Interaction 2020 (Kentaro Fukamizu, Leo Miyashita, and Masatoshi Ishikawa)
- 2019.10 MVE Award, Technical Group on Media Experience and Virtual Environment, The Institute of Electronics, Information and Communication Engineers (Ryo Ito, Leo Miyashita, and Masatoshi Ishikawa)
- 2018.12 Best Poster Award, ITS Symposium 2018 (Tomohiko Hayakawa, Yushi Moko, Kenta Morishita, and Masatoshi Ishikawa)
- 6 Excellent Paper Award, Symposium on Sensing via Image Information 2017 (SSII2017) (Michika Maruyama, Satoshi Tabata, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2017. 3 Research Encouragement Award, Dynamic Image-processing for Real Application Workshop 2017 (Chaerim Yeo, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2016. 3 Excellent Paper Award, Robotics Symposia (Taku Senoo, Masanori Koike, Kennichi Murakami, and Masatoshi Ishikawa)
- 2014. 6 Best Paper Award, Symposium on Sensing via Image Information 2013 (SSII2013) (Hiromasa Oku, Kohei Okumura, and Masatoshi Ishikawa)
- 2013. 6 Audience Award, Symposium on Sensing via Image Information 2013 (SSII2013) (Hiromasa Oku, Kohei Okumura, and Masatoshi Ishikawa)
- 2 Award for Encouragement of Research Presentation, the Japanese Society of Printing Science and Technology (Masahiro Yamada, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2012. 6 Excellent Paper Award, Symposium on Sensing via Image Information 2011 (SSII2011) (Hideshi Arima, Koutaro Itoyama, Masahiro Yamada, Takashi Komuro, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2011. 6 Audience Award, Symposium on Sensing via Image Information 2011 (SSII2011) (Hideshi Arima, Koutaro Itoyama, Masahiro Yamada, Takashi Komuro, Yoshihiro Watanabe, and Masatoshi Ishikawa)
- 2009. 7 Best Paper Award, 3D Image Conference 2008 (Hiroshi Sugihara, Yoshihiro Watanabe, Takashi Komuro, and Masatoshi Ishikawa)
- 2000.11 Award for Encouragement, the IEEE Solid-State Circuits Society Japan Chapter (Shingo Kagami, Takashi Komuro, Kazuya Ogawa, Idaku Ishii, and Masatoshi Ishikawa)
- 1998. 5 Best Paper Award, Robotics Symposia (Idaku Ishii, Tatsuya Murata, Ryosuke Matsuuchi, Takashi Komuro, and Masatoshi Ishikawa)

Award from the System Integration Technical Division of the Society of Instrument and Control Engineers

- 2023.12 SI2023 Best Presentation Award, (Satoshi Tabata, Tomohiro Sueishi, Leo Miyashita, and Masatoshi Ishikawa)
- 2022.12 SI2022 Best Presentation Award, (Himari Tochioka, Tomohiro Sueishi, and Masatoshi Ishikawa)
 - SI2022 Best Presentation Award, (Taku Senoo, Hiromichi Kawahara, Idaku Ishii, Kento Yabuuchi, Masahiro Hirano, Norimasa Kishi, and Masatoshi Ishikawa)
 - SI2022 Best Presentation Award, (Shouren Huang, Kenichi Murakami, and Masatoshi Ishikawa)
- 2021.12 SI2021 Best Presentation Award, (Tomohiro Sueishi, and Masatoshi Ishikawa)
 - SI2021 Best Presentation Award, (Kenichi Murakami, Shouren Huang, Masatoshi Ishikawa, and Yuji Yamakawa)
- 2020.12 SI2020 Best Presentation Award, (Hiromichi Kawahara, Taku Senoo, Idaku Ishii, Masahiro Hirano, Norimasa Kishi, and Masatoshi Ishikawa)
 - SI2020 Best Presentation Award, (Tomohiro Sueishi, Ryota Nishizono, and Masatoshi Ishikawa)
 - SI2020 Best Presentation Award, (Ayumi Matsumoto, Tomohiro Sueishi, and Masatoshi Ishikawa)
- 2019.12 SI2019 Best Presentation Award, (Satoshi Tanaka, Keisuke Koyama, Taku Senoo, and Masatoshi Ishikawa)
 - SI2019 Best Presentation Award, (Taku Senoo, Yunzhuo Wang, Masahiro Hirano, Norimasa Kishi, and Masatoshi Ishikawa)
 - SI2019 Best Presentation Award, (Ryo Ito, Leo Miyashita, and Masatoshi Ishikawa)
 - 3 SI2018 Best Presentation Award, (Takuya Kadowaki, Tomohiko Hayakawa, and Masatoshi Ishikawa)
- 2017.12 SI2017 Best Presentation Award, (Hirosi Sato, Yuji Yamakawa, Taku Senoo, and Masatoshi Ishikawa)
 - SI2017 Best Presentation Award, (Masahiro Hirano, Taku Senoo, Norimasa Kishi, and Masatoshi Ishikawa)
- 2015.12 SI2015 Best Presentation Award, (Masahiko Yasui, Yoshihiro Watanabe, and Masatoshi Ishikawa)
 - SI2015 Best Presentation Award, (Koichiro Ito, Tomohiro Sueishi, Yuji Yamakawa, and Masatoshi Ishikawa)
 - SI2015 Best Presentation Award, (Taku Senoo, Masanori Koike, Kenichi Murakami, and Masatoshi Ishikawa)
 - SI2015 Best Presentation Award, (Shouren Huang, Niklas Bergström, Yuji Yamakawa, Taku Senoo, and Masatoshi Ishikawa)
- 2014.12 SI2014 Best Presentation Award, (Masahiko Yasui, M. Sakti Alvissalim, Hirotsugu Yamamoto, and Masatoshi Ishikawa)
- 2012.12 SI2012 Best Presentation Award, (Naoto Kouda, Yousuke Suzuki, Aiguo Ming, Masatoshi Ishikawa, and Makoto Shimojo)
- 2010.12 SI2010 Best Presentation Award, (Kazuki Terada, Hiroaki Hasegawa, Naoto Kouda, Yousuke Suzuki, Aiguo Ming, Masatoshi Ishikawa, and Makoto Shimojo)
 - SI2010 Best Presentation Award, (Hiroaki Hasegawa, Yu Mukoyama, Yousuke Suzuki, Aiguo Ming, Masatoshi Ishikawa, and Makoto Shimojo)
 - 3 SI2009 Best Presentation Award, (Seiichi Teshigawara, Satoru Shimizu, Aiguo Ming, Masatoshi Ishikawa, and Makoto Shimojo)
- 2008.12 SI2008 Best Presentation Award, (Yoshitomo Mizoguchi, Kenjiro Tadakuma, Aiguo Ming, Masatoshi Ishikawa, and Makoto Shimojo)
- 2006.12 SI2006 Best Presentation Award, (Noriatsu Furukawa, Taku Senoo, Akio Namiki, and Masatoshi Ishikawa)
 - SI2006 Best Presentation Award, (Yuji Yamakawa, Akio Namiki, and Masatoshi Ishikawa)
- 2005.12 SI2005 Best Session Presentation Award, (Hiromasa Oku, Theodoros, Koichi Hashimoto, and Masatoshi Ishikawa)
- 2004.12 SI2004 Best Session Presentation Award, (Daisuke Shiokata, Akio Namiki, and Masatoshi Ishikawa)

Awards to Laboratory Members (57)

- 2023 Research Encouragement Award, Sensing Forum (Leo Miyashita)
- 2021 Young Excellent Presentation Award, XXIII World Congress of the Int. Measurement Confederation (IMEKO2021) (Masahiro Hirano)
- 2020 Best Presentation Award, Tokyo Branch, Illuminating Engineering Institute of Japan (Tomohiko Hayakawa)
 - Young Award, IEEE Robotics and Automation Society Japan Joint Chapter (IROS 2020) (Satoshi Tanaka)
 - Young Fellow Award for Best Presentation, the Japan Society of Mechanical Engineers (Mikihiko Ikura)
 - Funai Research Award, the Funai Foundation for Information Technology (Tomohiko Hayakawa)
- 2019 Excellent Presentation Award in Annual Meeting 2019, Japan Society of Civil Engineering (Yuki Kubota)
 - MIRU Student Encourage Award, MIRU 2019 (Yohta Kimura)
 - Young Fellow Award for Best Presentation, the Japan Society of Mechanical Engineers (Osamu Kojima)
 - Funai Research Award, the Funai Foundation for Information Technology (Leo Miyashita)
- 2018 Young Investigation Excellence Award, the Robotics Society of Japan (Keisuke Koyama)
 - Best Demo paper Award, 2018 Symposia on VLSI Technology and Circuits (Hirofumi Sumi)
 - Funai Academic Award, the Funai Foundation for Information Technology (Yuji Yamakawa)
 - Funai Research Award, the Funai Foundation for Information Technology (Tomohiro Sueishi)
 - Inoue Research Award for Young Scientists, the Inoue Foundation for Science (Leo Miyashita)
 - PRMU Monthly Best Presentation Award (Satoshi Tabata)
- 2017 MIRU Student Encourage Award, MIRU 2017 (Kenta Shinya)
 - Third Prize winner in the Internet and Mobile Internet (IT) Industry Final of The First China (Shenzhen) Innovation & Entrepreneurship International Competition (Shouren Huang, Yuji Yamakawa, Dengji Guo)
 - Award for Encouragement of Research, the Virtual Reality Society of Japan (Takatoshi Yoshida)
 - Young Author Award, the Society of Instrument and Control Engineers (Shouren Huang)
 - Young Author Award, the Society of Instrument and Control Engineers (Yuji Yamakawa)
 - Outstanding Reviewer, Mechatronics, Elsevier (Taku Senoo)
- 2016 Young Excellence Award, the System Integration Technical Division of the Society of Instrument and Control Engineers (Taku Senoo)
 - Best Student Research Presentation Award, the Institute of Image Information and Television Engineers (Kenjiro Saito)
 - Yamashita Memorial Award, Information Processing Society of Japan (Masahiro Hirano)
 - Best Research Presentation Award, Information Processing Society of Japan, The Special Interest Group of Computer Graphics and Visual Informatics (Masahiro Hirano)
 - Young Author Award, the Society of Instrument and Control Engineers (Satoshi Tabata)
 - Young Author Award, the Society of Instrument and Control Engineers (Masahiko Yasui)
 - Best Presentation Award, 2016 3rd Int. Conf. on Geological and Civil Engineering (ICGCE 2016) (Tomohiko Hayakawa)
- 2014 Young Fellow Award for Best Presentation, the Japan Society of Mechanical Engineers (Shohei Noguchi)
 - Young Engineers Award (Research), the Japan Society of Mechanical Engineers (Yuji Yamakawa)
- 2013 Young Author Award, Asia-Pacific Symposium on Measurement of Mass, Force and Torque (APMF2013) (Yuji Yamakawa)
 - Poster Award, International Workshop on Optical Terahertz Science and Technology (OTST) (Yasuaki Monnai)
 - Inoue Research Award for Young Scientists, the Inoue Foundation for Science (Yuji Yamakawa)
- 2012 Award for Encouragement of Research and Technology, the Measurement Technical Division of the Society of Instrument and Control Engineers (Yuji Yamakawa)
 - Excellent Student Presentation Award, the Institute of Image Information and Television Engineers (Kohei Okumura)

- Young Excellence Award, the System Integration Technical Division of the Society of Instrument and Control Engineers (Yuji Yamakawa)
- Suzuki Memorial Incentive Award, the Institute of Image Information and Television Engineers (Kohei Okumura)
- Funai Research Award, the Funai Foundation for Information Technology (Yuji Yamakawa)
- 2011 Young Author Award, Asia-Pacific Symposium on Measurement of Mass, Force and Torque (APMF2011) (Yuji Yamakawa)
- Young Investigation Excellence Award, the Robotics Society of Japan (Yuji Yamakawa)
- 2010 Young Author Award in IROS2010, IEEE Robotics and Automation Society Japan Chapter (Yuji Yamakawa)
- Excellence Prize, Entertainment Division of Japan Media Arts Festival (Alvaro Cassinelli, Daito Manabe, Yusaku Kuribara, and Alexis Zerroug)
- 2009 Young Investigation Excellence Award, the Robotics Society of Japan (Hiromasa Oku)
- Ericsson Young Scientist Award, Ericsson Japan (Yoshihiro Watanabe)
- 2008 Best Poster Award, Global COE ADIST Symposium, Toyohashi University of Technology (Yuji Yamakawa)
- Best Poster Award, IEIEC Image Media Processing Symposium (Kota Yamaguchi)
- Young Author Award in ICRA'08, IEEE Robotics and Automation Society Japan Chapter (Takeshi Hasegawa)
- 2006 Grand Prize, Art Division of Japan Media Arts Festival (Alvaro Cassinelli)
- Young Investigation Excellence Award, the Robotics Society of Japan (Naoko Ogawa)
- 2005 Young Author Award, the Society of Instrument and Control Engineers (Taku Senoo)
- 2004 Young Investigation Excellence Award, the Robotics Society of Japan (Shingo Kagami)
- 2002 Best Author Award, the Institute of Image Information and Television Engineers (Takashi Komuro)
- Ericsson Young Scientist Award, Ericsson Japan (Takashi Komuro)
- 2000 Research Award, the Research Foundation for Opto-Science and Technology (Makoto Naruse)
- Inoue Research Award for Young Scientists, the Inoue Foundation for Science (Makoto Naruse)
- Young Investigation Excellence Award, the Robotics Society of Japan (Akio Namiki)
- 1999 Young Investigation Excellence Award, the Robotics Society of Japan (Idaku Ishii)

Awards to Laboratory's Members from the University of Tokyo (9)

Dean's Award, Graduate School of Information Science and Technology, the University of Tokyo

- 2022 Department of Information Physics and Computing, Doctor Course (Masahiko Yasui)
- 2019 Department of Information Physics and Computing, Doctor Course (Satoshi Tabata)
- 2017 Department of Information Physics and Computing, Doctor Course (Leo Miyashita)
- Department of Information Physics and Computing, Master Course (Takatoshi Yoshida)
- 2016 Department of Information Physics and Computing, Master Course (Masahiko Yasui)
- 2014 Department of Creative Informatics, Doctor Course (Shouren Huang)
- 2013 Department of Creative Informatics, Master Course (Daniel Heffernan)
- 2011 Dean's Award, Graduate School of Information Science and Technology (Department of Information Physics and Computing, Doctor Course) (Yuji Yamakawa)
- 2008 Department of Creative Informatics, Master Course (Kazuhiro Terajima)

Awards to Co-Authors (Non Laboratory's Members) (5)

- 2013 Young Fellow Award for Best Presentation, the Japan Society of Mechanical Engineers (Ichiro Miyamoto, Shimojo Laboratory, The University of Electro-Communications)
- 2011 Young Fellow Award for Best Presentation, the Japan Society of Mechanical Engineers (Satoru Shimizu, Shimojo Laboratory, The University of Electro-Communications)
- 2010 Young Excellence Award, the System Integration Technical Division of the Society of Instrument and Control Engineers (Seiichi Teshigawara, Shimojo Laboratory, The University of Electro-Communications)
- Young Investigation Excellence Award, the Robotics Society of Japan (Seiichi Teshigawara, Shimojo Laboratory, The University of Electro-Communications)
- 2009 Young Fellow Award for Best Presentation, the Japan Society of Mechanical Engineers (Seiichi Teshigawara, Shimojo Laboratory, The University of Electro-Communications)

Awards to Related Persons (2)

- 2018 Best Animated Music Videos, 25. Internationale Trickfilm-Festival Stuttgart (Nobumichi Asai, and Eiji Tanigawa)
- Recommended Work by Review Committee, Art Division of Japan Media Arts Festival (Nobumichi Asai, Eiji Tanigawa, and Aya Bambi)

Awards to Related Company and Organization (1)

- 2017 JEITA Venture Award, Japan Electronics and Information Technology Industries Association (Exvision Corporation)

2. Research (Overview / Research Projects)

Overview

We are going on many projects related on integration of recognition and behavior using recent developing technologies such as semiconductor integration, optics in computing, and parallel processing. In other words, we are trying to realize human sensory processing functionalities including sensory integration, brain function for information processing using hierarchical parallel processing, and intelligent behavior on artificial systems beyond human.

The details of our researches are described in our booklet on our research. In addition, my research activities are listed in a booklet.

High-Speed Intelligent Robot Systems / Sensor Fusion

- Ultra-high-speed Intelligent Robots / Recognition Behavior Systems / High-speed Robot Tasks
- Hierarchical Parallel Processing Architecture Using Parallel Decomposition
- Active Sensor Fusion Systems / Active Sensing
- Dynamics Matching / Dynamic Compensation / High-speed Visual Feedback
- Sensor Fusion Using Internal Model / Sensor Network
- Human-robot Interaction / Target Tracking

High-Speed Image Tracking / Dynamic Active Vision

- High-speed Tracking Optics / Optical Axis Control / Focus Control
- Microvisual Feedback / Microbial Tracking System
- Sports Science / High-Speed Tracking Imaging / Physical Measurement
- Active Optical Systems / High-speed Variable Focus Lens / High-speed Projector
- Real-time Dynamic Image Control System
- Dynamic Projection Mapping (Tracking Type)

Massively Parallel and Ultra-high-speed Vision / Vision Systems

- Vision Chip Implementation Using VLSI Technology / High-speed Vision Camera
- 3D Shape Measurement / 3D Motion and Kinetics Measurement Using High-speed Vision
- High-speed Feature Extraction / Model Matching / High-speed Algorithm
- Parallel Processing Architecture for High-speed Vision
- High-speed Image Inspection and Control Systems / Hierarchical Integration System with AI
- Dynamic Projection Mapping (Shape Measurement Type)

High-Speed Information Environment / Next Generation Human Interface

- Human Interface Using Proprioceptive Feedback
- Construction of High-speed Information Environment / Virtual Reality (VR, AR, MR)
- Visual and Tactile Fusion Experiments / Audiovisual Fusion Models / Latency Perception Measurements
- Multimodal Interface / Dynamic Interaction
- Unrestrained, Real-world, Multidimensional, Low-latency Information Display
- Interactive Art / Next-generation User Interface

We have a plan to expand the above research to a wide research area based on advanced technology basis from the viewpoint of integrated intelligent system, implementation of brain function, and intelligent robots.

We performed research projects below in the past.

Optics in Computing / Optical Interconnection / Opto-Electronic Integrated System

- Neurocomputing System with Learning Capabilities
- Optoelectronic Hybrid Parallel Processing
- Reconfigurable Optical Interconnection
- Smart Pixels

Tactile Sensors and Haptics

- Position Detection Sensor Using Pressure Conductive Rubber
- Tactile Imaging Sensor Using VIDEO Signal
- Processing Architecture and Implementation of Haptic Motion
- Application of Tactile Sensor

Three Dimensional Measurement System for Human Motion / Motion Capture System

- Development of High Speed 3D Motion Capture System
- Analysis of Motion Capture Data and Sports Analysis

Circuit Model of Information Processing in Brain

- Fluxon Logic and Neuro Device Using Josephson Transmission Line
- Lattice Type Network Circuits

Research Projects

Laboratory

- Next Generation Information Environment Systems Using High-speed Vision and Tracking (2020-2024)
- Research on High-speed Vision Technology for Applications i Next Generation Production Systems (2020-2024)
- Multidimensional Digital Twin Sensing and Reconstraction Based on High-speed Vision (2021-2023)
- Applications of Intelligent Systems Using Hgh-speed Image Processing (2016-2020)

Sensor Fusion

- Research on FA Technology Using High-speed Image Processing (2017-2021)
- Research on Image Processinhg for Recognition of Vehicle Motion ang Environment by Proximity Sensing of Moving Object for Vehicle Control (2018-2021)
- Development of Realtime IoT System and Applications Using High-speed Vision Network (2017-2020)
- Research on High-speed Manipulation Using Active Recognition Method of Objects (2015-2018)
- Development of Ultra-MEMS Conector for Robots Using Laser Exposure Technology (2016-2018)
- High Speed Intelligent Robots Using Ultra High Speed Vision (2012-2016)
- Development of Large Scale High-speed Sensing System and Its Applications (2015-2016)
- Practical Applications of High-speed Image Processing Using High-sensitivity, High-speed, and Low Noise CMOS Imager (2014-2016)
- Collaboration Research on Applications of Next Generation High-speed and High Functionality Sensing Syustems (2016)
- Creation of Harmonized Dynamic Information Environment Based on High Speed Sensor Technology (2009-2015)
- Bidirectional Recognition between Objects and Environment Using Networked High Speed Vision (2012-2014)
- Advanced Vision and Control for Intelligent Autonomous System (2011-2014)
- Advanced Vision and Control for Intelligent Autonomous System (2011-2013)
- Research on High Speed Image Measurement and Control (2012-2013)
- Research and Development of Architectures of Integrated Tactile Sensor (2010-2013)
- Ultra High Speed Recognition and Behavior System with Distributed Network Architecture (2002-2006)
- Synthetic Realization of Hand-Eye System Based on Sensory-Motor Integration Theory (1999-2009)
- Interactive Network Architecture Based on Sensor Fusion (2000-2004)
- Tangible System in Real World Using High Speed Vision (2001-2003)
- Biomedical Measurement and Control Project : Basic Research on Sensing and Information Processing for Biomedical Applications (1997-2001)
- Active Recognition and Behavior System Using High Speed Sensor Feedback Based on Hierarchical Fusion Model (1998-2000)
- Real Time Interaction Based on Sensory Integration (1995-1999)
- Virtual Reality Project : Sensory Data Display and Interaction between Perception and Behavior (1995-1997)
- Intelligent Robot Project : Active Sensory-Motor Integration System Using Vision and Tactile Sensing (1995-1997)
- Sensor Fusion Project : Sensing Architecture (1991-1993), Intentional Sensing (1994-1995)
- Visuo-Tactile Fusion System Using Active Sensing (1994-1995)
- Autonomous Distributed System Project : Sensor Fusion System Using Internal Model (1990-1992)
- Analysis of Brain Function Project : Analog Associative Memory Model (1989-1991)

Dynamic Vision System / Dynamic Image Control / Micro Visual Feedback

- New Developments in Vital and Biological Information Using High-speed Tracking Technology (2022-2023)
- Research on High-accuracy Counting and Shape Inspectio Technology of Multiple High-speed Moving Objects by High-speed Imaging (2016-2021)
- Advances in Image Measurement System for High Speed Flying Objects (2012-2018)
- Applications of Spatio Temporal Analysis (2016-2018)
- Dynamic Object Image Recording by 1ms Auto Pan/Tilt System (2014-2017)
- Development of Projection System (2016-2017)
- Creation of Harmonized Dynamic Information Environment Based on High Speed Sensor Technology (2009-2014)
- Research and Development of High-speed and High-accuracy Dynamoph Lens (2012-2014)
- Collaboration Research on High Speed Vision (2013)
- Inprovement of High Speed Image Mesurement System for High Speed Flying Objects (2012-2013)
- High-speed Tracking of Objects with Various Characteristic (2012-2014)
- Basic Research on High Speed and High Resolution Imaging System (2013)
- Research on High-speed Data Trasfering for DMD (2014)
- Expansion of Vision Chip Applications (2007-2011)

System Vision Design / Vision Architecture / Vision Chip

- Next Generation Industrial High-speed Robot Control System (2020-2021)
- High-precision All-around Object Shape Measurement System with High-resolution Texture Information Acquisition Function (2021-2022)
- Research on Next-generation High-speed 3D Shape Measurement System(2020-2022)
- Next Generation Industrial High-speed Robot Control System (2020-2021)
- Development of High-speed Vision Network System (2015-2019)

- Development of Inspection Technology for High Accuracy Counting and Shape of Multiple Objects by High-speed Imaging (2016-2018)
- Fluid Analysis Using High Speed Vision (2010-2018)
- Applications of Vision Chip for Vehicle and Environment (2014-2017)
- Verification of Realizability of High-speed and High Luminance Projector (2017)
- Research on Image Processing (2010-2014)
- Collaboration Research on High-speed Camera (2013-2014)
- Bidirectional Recognition between Objects and Environment Using Networked High Speed Vision (2012-2014)
- Creation of Harmonized Dynamic Information Environment Based on High Speed Sensor Technology (2009-2014)
- Collaboration Research on Next Generation Sensing Architecture (2013-2015)
- Collaboration Research on High Speed Vision(2013-2014)
- Development of High Speed Vision Module (2006-2008)
- Preprocessing for Smart Visual Feedback (1999-2002)
- Ultra high speed Manipulation by Using 1ms Vision Chip with Massively Parallel Processing Architecture (1999-2002)
- Fast Gesture Recognition Using Massively Parallel and High-speed Vision (1999-2001)
- High Speed Image Recognition for Multi Media (1999-2001)
- Development of Super Vision Chip (1996-2000)
- High Speed Micro Visual Feedback (1998-2000)
- Development of Massively Parallel Vision System for High Speed Visual Recognition (2000)
- Development of High Speed Intelligent Vision System (1997-1999)
- Integrated Intelligent Silicon Electronics Project :
Real Time Two Dimensional Information Processing System (1995-1998)
- Massively Parallel and High Speed One Chip Vision (1994-1996)

Active Perception / Meta Perception

- Development of High-speed Vision and High-speed Intelligent Systemss for Nerve System Analysis under Freely Moving Conditions (2017-2022)
 - Joint Research on Development of High-Speed Image Processing System (2018-2022)
 - Joint Research on Improving Crack Detection Accuracy of High-Speed Image Processing Systems (2022)
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- Sophisticated Inspection Technology for Highway (2013-2021)
 - Development of Smart Ceramic Drilling Machine Using Ultrashort Pulse Laser (2016-2018)
 - Applications of Spatio Temporal Analysis (2016-2018)
 - Research on Applications of High-speed Vision in Railroad Area (2018-2019)
 - High speed computer vision for in-car-gesture recognition and for crash avoidance (2014-2017)
 - Creation of Harmonized Dynamic Information Environment Based on High Speed Sensor Technology (2001-2006)
 - Research on Meta Perception (2012-2013)
 - Expansion of Vision Chip Applications (2007-2011)

Optics in Computing

- Research on High Speed 3D Micro Imaging Using WDM Technology (2001-2003)
- Massively Parallel Confocal Microscope System Using Surface Emitting Laser Array (2001-2002)
- Massively Parallel VLSi Photonics Using Free Space Optical Interconnection (2001)
- Real World Intelligence Project : Digital Smart Pixel Architecture (1997-2000)
- Design of Parallel Optical Interconnection Using Functional Filter (1998-2000)
- Submicron Alignment of Optical Interconnection based on Singular Value Decomposition (1999-2000)
- Robot System with Free Space Optical Interconnection Using VCSEL(1999-2000)
- Opto-Electronic Hybrid Computing System (1998-1999)
- Optical Interconnection for Massively Parallel Computer (1998-1999)
- Massively Parallel and High Speed Optical Computing System (1997-1999)
- Optical Quantum Computing (1997-1998)
- Parallel Optoelectronic Computing and Its Application (1995-1996)
- Massively Parallel Processing Using Optical Interconnection (1994-1995)
- Real World Computing Project : Basic Study on Learning Capabilities and Massively Parallel Implementation (1993-1995)
- Ultra Parallel and Ultra High Speed OptoElectronics Project :
Massively Parallel Optical Computing with Learning Capabilities (1991-1993)

3. Papers (Invited Papers / Regular Papers)

Invited Papers (9)

in English

- Yoshihiro Watanabe, Hiromasa Oku, and Masatoshi Ishikawa: Architectures and Applications of High-Speed Vision (Invited Review Paper), *Optical Review*, Vol.21, No.6, pp.875-882 (2014)
- Masatoshi Ishikawa: Is There Real Fusion between Sensing and Network Technology? - What are the Problems? (Invited Paper), *IEICE Trans. Commun.*, Vol.E93.B, No.11, pp.2855-2858 (2010)
- Akio Namiki, Takashi Komuro, and Masatoshi Ishikawa: High Speed Sensory-Motor Fusion Based on Dynamics Matching (Invited Paper), *Proc. IEEE*, Vol.90, No.7, pp.1178-1187 (2002)
- Neil McArdle, Makoto Naruse, Haruyoshi Toyoda, Yuji Kobayashi, and Masatoshi Ishikawa: Reconfigurable Optical Interconnections for Parallel Computing (Invited), *Proc. IEEE*, Vol. 88, No.6, pp.829-837 (2000)
- N.McArdle, M.Naruse, and M.Ishikawa: Optoelectronic Parallel Computing Using Optically Interconnected Pipelined Processing Arrays (Invited), *IEEE J. of Selected Topics in Quantum Electronics*, Vol.5, No.2, pp.250-260 (1999)
- Masatoshi Ishikawa: System Architecture for Integrated Optoelectronic Computing, *Optoelectronics - Devices and Technologies* -, Vol.9, No.1, pp.29-38 (1994)

in Japanese

- Shingo Kagami, and Masatoshi Ishikawa: Sensor Fusion -- An Architectural Perspective on Information Processing in Sensor Networks, *IEICE Trans. on Fundamentals*, Vol.J88-A, No.12, pp.1404-1412 (2005)
- Masatoshi Ishikawa, and Takashi Komuro: Digital Vision Chip and Its Applications, *IEICE Trans. on Electronics*, Vol.J84-C, No.6, pp.451-461 (2001)
- Masatoshi Ishikawa: Parallel Processing for Sensory Information, *IEICE Trans. on Electronics*, Vol.J74-C-II, No.5, pp.255-266 (1991)

Regular Papers (247)

in English

- Shuangjiang Huang, Fengnian Song, Lihui Wang, Yutao Huang, Yuan He, Shi Bai, Tao Chen, and Masatoshi Ishikawa: High-speed Active Vision Pose Perception and Tracking Method Based on Pan-Tilt Mirrors for 6-DOF Dynamic Projection Mapping, *Optics and Lasers in Engineering*, Vol.188, pp.1-13 (2025) 108888
- Shouren Huang, W. Wang, Leo Miyashita, Kenichi Murakami, Yuji Yamakawa, and Masatoshi Ishikawa: Utilizing High-Speed 3D Vision for a Commercial Robotic Arm: Direct Integration and the Dynamic Compensation Approach, *Journal of Robotics and Mechatronics*, Vol.37, No.2, pp.424-433 (2025)
- Leo Miyashita, Satoshi Tabata, and Masatoshi Ishikawa: High-Speed 3D Vision Based on Structured Light Methods, *Metrology*, Vol.5, No.2, 24, pp.1-11 (2025)
- Tomohiro Sueishi, Himari Tochioka, and Masatoshi Ishikawa: High-speed Spin Measurement System for Dotted Table Tennis Ball Using Single-frame M-sequence Multi-exposures, *SICE J. of Control, Measurement, and System Integration*, Vol.18, Issue 1, pp.1-11 (2025)
- Shuangjiang Huang, Fengnian Song, Lihui Wang, Yutao Huang, Yuan He, Shi Bai, Tao Chen, and Masatoshi Ishikawa: High-speed Active Vision Pose Perception and Tracking Method Based on Pan-Tilt Mirrors for 6-DOF Dynamic Projection Mapping, *Optics and Lasers in Engineering*, Vol.188, pp.1-13 (2025) 108888
- Yushi Moko, Yuka Hiruma, Tomohiko Hayakawa, Yushan Ke, Yoshimasa Onishi, and Masatoshi Ishikawa: Vehicle Self-Position Estimation Using Lighting Recognition in Expressway Tunnel for Visual Inspection Flow, *Journal of Robotics and Mechatronics*, Vol.36 No.3, pp.746-757 (2024)
- Himari Tochioka, Tomohiro Sueishi, and Masatoshi Ishikawa: Apollon Mark: Bounce Mark Visualization System for Ball Sports Judgement Using Prediction-based Preceding Mirror Control and Projection, *SICE J. of Control, Measurement, and System Integration*, Vol.17, Issue 1, pp.164-175 (2024)
- Masahiko Yasui, Ryota Iwataki, Masatoshi Ishikawa, and Yoshihiro Watanabe: Projection Mapping with a Brightly Lit Surrounding Using a Mixed Light Field Approach, *IEEE Trans. on Visualization and Computer Graphics*, Vol.30, No.5, pp.2217-2227 (2024)
- Jiaqi Li, Lin Li, Lihui Wang, Lei Li, Shaoyong Li, and Masatoshi Ishikawa: Adaptive Milliseconds Tracking and Zooming Optics Based on a High-speed Gaze Controller and Liquid Lenses, *Optics Express*, Vol.32, Issue2, pp.2257-2270 (2024)
- Lihui Wang, Satoshi Tabata, Hongjin Xu, Yunpu Hu, Yoshihiro Watanabe, and Masatoshi Ishikawa: Dynamic Depth-of-field Projection Mapping Method Based on a Variable Focus Lens and Visual Feedback, *Optics Express*, Vol.31, Issue 3, pp.3945-3953 (2023)
- Yunpu Hu, Leo Miyashita, and Masatoshi Ishikawa: Differential Frequency Heterodyne Time-of-Flight Imaging for Instantaneous Depth and Velocity Estimation, *ACM Transactions on Graphics*, Vol.42, No.1, pp.9:1-9:13 (2023)
- Yuri Mikawa, Tomohiro Sueishi, Yoshihiro Watanabe, and Masatoshi Ishikawa: Dynamic Projection Mapping for Robust Sphere Posture Tracking Using Uniform/Biased Circumferential Markers, *IEEE Trans. on Visualization and Computer Graphics*, Vol.28, No.12, pp.4016-4031 (2022)
- Haowen Liang, Masatoshi Ishikawa, Hao Xu, Satoshi Tabata, and Lihui Wang: Accurate Measurement of Virtual Image Distance for Near-Eye Displays Based on Auto-Focusing, *Appl. Opt.* Vol.61, Issue 30, pp.9093-9098 (2022)

- Leo Miyashita and Masatoshi Ishikawa: Portable High-Speed Optical Gaze Controller with Vision Chip, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.1133-1140 (2022)
- Leo Miyashita, Yohta Kimura, Satoshi Tabata, and Masatoshi Ishikawa: High-Speed Depth-Normal Measurement and Fusion Based on Multiband Sensing and Block Parallelization, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.1111-1121 (2022)
- Tomohiro Sueishi, Ryota Nishizono, and Masatoshi Ishikawa: EmnDash: A Robust High-Speed Spatial Tracking System Using a Vector-Graphics Laser Display with M-Sequence Dashed Markers, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.1085-1095 (2022)
- Hyuno Kim, Yuji Yamakawa, and Masatoshi Ishikawa: Seamless Multiple-Target Tracking Method Across Overlapped Multiple Camera Views Using High-Speed Image Capture, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.1043-1052 (2022)
- Taku Senoo, Atsushi Konno, Yunzhuo Wang, Masahiro Hirano, Norimasa Kishi and Masatoshi Ishikawa: Tracking of Overlapped Vehicles with Spatio-Temporal Shared Filter for High-Speed Stereo Vision, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.1033-1042 (2022)
- Tomohiko Hayakawa, Yushi Moko, Kenta Morishita, Yuka Hiruma, Masatoshi Ishikawa : Tunnel Lining Surface Monitoring System Deployable at Maximum Vehicle Speed of 100 km/h Using View Angle Compensation Based on Self-Localization Using White Line Recognition, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.997-1010 (2022)
- Yuriko Ezaki, Yushi Moko, Tomohiko Hayakawa, and Masatoshi Ishikawa : Angle of View Switching Method at High-Speed Using Motion Blur Compensation for Infrastructure Inspection, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.985-996 (2022)
- Leo Miyashita, and Masatoshi Ishikawa: Real-Time Inspection of Rod Straightness and Appearance by Non-Telecentric Camera Array, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.975-984 (2022)
- Shouren Huang, Kenichi Murakami, Masatoshi Ishikawa, and Yuji Yamakawa: Robotic Assistance for Peg-and-Hole Alignment by Mimicking Annular Solar Eclipse Process, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.946-955 (2022)
- Kenichi Murakami, Shouren Huang, Masatoshi Ishikawa, and Yuji Yamakawa: Fully Automated Bead Art Assembly for Smart Manufacturing Using Dynamic Compensation Approach, *Journal of Robotics and Mechatronics*, Vol.34, No.5, pp.936-945 (2022)
- Yu-Ping Wang, Senwei Xie, Lihui Wang, Hongjin Xu, Satoshi Tabata, and Masatoshi Ishikawa: ARSlice: Head-Mounted Display Augmented with Dynamic Tracking and Projection, *J. of Computer Science and Technology*, Vol.37, No.3, pp.666-679 (2022)
- Kenichi Murakami, Tomohiko Hayakawa, and Masatoshi Ishikawa: Hybrid Surface Measuring System for Motion-blur Compensation and Focus Adjustment Using a Deformable Mirror, *Applied Optics*, Vol.9, Issue 2, pp.429-438 (2022)
- Ruimin Cao, Jian Fu, Hui Yang, Lihui Wang, and Masatoshi Ishikawa: Robust Optical Axis Control of Monocular Active Gazing Based on Pan-tilt Mirrors for High Dynamic Targets, *Optics Express*, Vol.29, Issue 24, pp.40214-40230 (2021)
- Masahiro Hirano, Yuji Yamakawa, Taku Senoo, and Masatoshi Ishikawa: An Acceleration Method for Correlation-based High-speed Object Tracking, *Measurement: Sensors*, Vol.18, 100258, pp.1-4 (2021)
- Yuki Kubota, Yushan Ke, Tomohiko Hayakawa, Yushi Moko, and Masatoshi Ishikawa: Optimal Material Search for Infrared Markers under Non-Heating and Heating Conditions, *Sensors*, Vol.21, Issue 19, Article No.6527, pp.1-17 (2021)
- Hyuno Kim, and Masatoshi Ishikawa: Sub-Frame Evaluation of Frame Synchronization for Camera Network Using Linearly Oscillating Light Spot, *Sensors*, Vol.21, Issue 18, Article No.6148, pp.1-14 (2021)
- Leo Miyashita, Akihiro Nakamura, Takuto Odagawa, Masatoshi Ishikawa: BIFNOM: Binary-Coded Features on Normal Maps, *Sensors*, Vol.21, Issue 10, Article No.3469, pp.1-12 (2021)
- Hongjin Xu, Lihui Wang, Satoshi Tabata, Yoshihiro Watanabe, and Masatoshi Ishikawa: Extended Depth-of-field Projection Method Using a High-speed Projector with a Synchronized Oscillating Variable-focus Lens, *Appl. Opt.*, Vol.60, Issue 13, pp.3917-3924 (2021)
- Masahiko Yasui, Yoshihiro Watanabe, and Masatoshi Ishikawa: Wide viewing angle with a downsized system in projection-type integral photography by using curved mirrors, *Optics Express*, Vol.29, Issue 8, pp.12066-12080 (2021)
- Yuki Kubota, Tomohiko Hayakawa, and Masatoshi Ishikawa: Dynamic Perceptive Compensation for the Rotating Snakes Illusion with Eye Tracking, *PLOS ONE* 16(3): e0247937, pp.1-20 (2021)
- Yuji Yamakawa, Yugo Katsuki, Yoshihiro Watanabe, and Masatoshi Ishikawa: Development of a High-speed, Low-latency Telemanipulated Robot Hand System, *Robotics*, Vol.10, Issue 1, Article No.41, pp.1-22 (2021)
- Mikihiro Ikura, Leo Miyashita, and Masatoshi Ishikawa: Stabilization System for UAV Landing on Rough Ground by Adaptive 3D Sensing and High-speed Landing Gear Adjustment, *J. of Robotics and Mechatronics*, Vol.33 No.1 pp.108-118 (2020)
- Yuji Yamakawa, Yutaro Matsui, and Masatoshi Ishikawa: Development of a Real-Time Human-Robot Collaborative System Based on 1 kHz Visual Feedback Control and Its Application to a Peg-in-Hole Task, *Sensors*, Vol.21, Issue 2, Article No.663, pp.1-25 (2021)
- Seohyun Lee, Hyuno Kim, Hideo Higuchi, and Masatoshi Ishikawa: Visualization Method for the Cell-level Vesicle Transport Using Optical Flow and Diverging Colormap, *Sensors*, Vol.21, Issue 2, Article No.522, pp.1-13 (2021)
- Kenichi Murakami, Koki Ishimoto, Taku Senoo, and Masatoshi Ishikawa: Human Robot Hand Interaction with Plastic Deformation Control, *Robotics*, Vol.9, Issue 3, Article No.73, pp.1-15 (2020)
- Zhangxu Pan, Chan Guo, Xianchi Wang, Jiucheng Liu, Ruimin Cao, Yanfen Gong, Jiantai Wang, Ningyang Liu, Zhitao Chen, Lihui Wang, Masatoshi Ishikawa, and Zheng Gong: Wafer - Scale Micro - LEDs Transferred onto an Adhesive Film for Planar and Flexible Displays, *Advanced Materials Technologies*, 2000549, pp.1-11 (2020)
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- Masatoshi Ishikawa: High-speed Image Sensing and Its Applications (Awards lecture), 2017 Institute of Mesurement and Control (InstMC) Awards Nights (London, 2017.11.28)
- Masatoshi Ishikawa: High-speed Image Processing and Its Applications in Sports Science (Special Lecture), Japan Table Tennis Association Sports Science and Medicine Committee Int. Meeting 2015 (Tokyo, 2015.9.20) / Programme and Abstracts, p.10
- Masatoshi Ishikawa: High Speed Vision and Its Applications (Invited Lecture), Advance Science Institute 2001 (Tokyo, 2001.7.28)
- Masatoshi Ishikawa: How Can High Speed Vision Change Robotics World? (tutorial on "Sensing and Actuation toward 21st Century"), Int. Conf. on Intelligent Robots and Systems (Takamatsu, 2000.10.31)

- Masatoshi Ishikawa: Optoelectronic Parallel Computing Systems and Applications (Invited Lecture), Opto- electronics Research in Japan and the U.S. (Stanford, 1996.5.9)
- Masatoshi Ishikawa: The Art of Sensing (Tutorial), The Fourth Int. Symp. on Measurement and Control in Robotics (Houston, 1994.11.30)

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- Masatoshi Ishikawa: (no title) (Invited), Competition and Cooperation among Global Industries, Science and Technology in Society forum (STS forum) (Kyoto, 2017.10.1)
- Masatoshi Ishikawa: (no title) (Invited, Plenary Session), Lights and Shadows of ICT, Science and Technology in Society forum (STS forum) (Kyoto, 2016.10.3)
- Masatoshi Ishikawa: Interactive Display Technologies Using High-speed Image Processing (Invited), Workshop on 3D/Hyper-Realistic Display in The 21st Int. Display Workshops (IDW '14) (Niigata, 2014.12.4) / Proceedings, pp.812-813
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- Masatoshi Ishikawa: Panel: Where Robots Are Headed (Invited), Bloomberg Businessweek Design 2013 (San Francisco, 2013.1.14)
- Masatoshi Ishikawa: High Speed Image Processing and Its Application Systems (Invited), The 10th Int. System-on-Chip (SoC) Conf., Exhibit & Workshops (Irvine, 2012.10.25) / Conf. Proceedings, pp.1-21
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- Masatoshi Ishikawa, Takashi Komuro, Yoshihiro Nakabo, and Idaku Ishii: Massively Parallel Processing Vision and Its Applications (Invited), 4th Int. Conf. on Soft Computing (Iizuka, 1996.10.3) / proceedings, pp.117-120
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- Tomohiko Hayakawa, Tomohiro Sueishi, Yuka Hiruma, Himari Tochioka, Taku Senoo, Shouren Huang, and Masatoshi Ishikawa: Object Grasping Assist System with Reading Human Intention and Predicting Object Position, 11th Int. Conf. on Automation, Robotics, and Applications (ICARA 2025) (Zagreb, Croatia, 2025.2.13)
- Leo Miyashita, and Masatoshi Ishikawa: Simultaneous High-speed Depth Measurement and Video Presentation using a Video-rate Projector, IEEE Int. Conf. Cybernetics & Informatics 2025 (K&I'25) (Mikulov, Czech, 2025.2.3) / pp.1-6
- Leo Miyashita, Satoshi Tabata, and Masatoshi Ishikawa: Hierarchical ArUco Marker Array for Coarse-to-Fine Localization in XR applications, 2025 IEEE Int. Conf. on Artificial Intelligence & eXtended and Virtual Reality (AIxVR2025) (Lisbon, 2025.1.29) / Proceedings, pp.209-212
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7. Academic Activities (Membership / Domestic / International / Editorial Board / Other Activities)

Membership

Membership

- Society of Instrument and Control Engineers
- Virtual Reality Society of Japan
- Japanese Society of Applied Physics
- Japanese Society of Mechanical Engineering
- Information Processing Society of Japan
- Engineering Academy of Japan
- Robotics Society of Japan
- Institute of Image Information and Television Engineers
- Optical Society of Japan
- Institute of Electronics, Information, Communication Engineers
- Institute of Electrical Engineers of Japan

Fellow

- Society of Instrument and Control Engineers
- Institute of Electrical Engineers of Japan
- Japan Federation of Engineering Societies
- Robotics Society of Japan
- Japan Society of Mechanical Engineers
- Information Processing Society of Japan

Honorary Member

- Society of Instrument and Control Engineers

Domestic Academic Society

- President of Society of Instrument and Control Engineers (SICE) (2011)
- Vice President of Society of Instrument and Control Engineers (SICE) (2010)
- IEICE Technical Committee on Ubiquitous Sensor Network, Adviser (2007-)
- IEICE Technical Committee on Optical Interconnection and Information Processing, Vice Chair (1997-1999)
- Advanced Robotics, Focused Section on Electronic Hardware and Systems for Robotics, Guest Editor (1999)
- Trans. IEICE, Special Issue on Multisensor Fusion and Integration, Guest Editor (1998)
- Director of Society of Instrumentation and Control Engineers (1995-1996)

International Academic Society

- IMEKO (International Measurement Confederation), Advisory President, Chairman of the Advisory Board (2021.9-2024.8)
- IMEKO (International Measurement Confederation), President (2018.9-2021.9)
- IMEKO (International Measurement Confederation), President Elect, Chairman of the Technical Board (2015.9-2018.9)
- 2009 Fifth Asia-Pacific Computing and Philosophy Conference, Conference Chair
- 2001 International Conference on Electronic Measurement and Instruments, Vice Chair
- 1999 International Conference on Electronic Measurement and Instruments, Vice Chair
- IEEE LEOS technical committee member (Optical Interconnects and Processing Systems subcommittee) (1996-1998, 1998-2000)
- IEEE Tokyo Chapter Program Committee, Vice Chairman (1995-1996)
- the IAPR technical committee TC6, "Special Hardware and Software Environments", Chair
- 1996 IEEE International Conference on Multisensor Fusion and Integration for Intelligent Systems, General Chair
- 1996 Optical Computing, Steering Committee, Vice Chair
- 1994 IEEE International Conference on Multisensor Fusion and Integration for Intelligent Systems, Program Co-Chair
- International Conference Program Committee Member
 IROS93, ICRA95, IROS96, FUSION98, MFI2006, MFI2010, ECVW2009, ECVW2010, ECVW2012
 Transducer97, IMEKO-XV
 Intelligent Vehicles 2000, ICPR2002
 OC96, OC98, OC99, OC2000, OC2001, MPPOI97, LEOS96, LEOS97, LEOS98, LEOS99, LEOS2000
 Smart PIXEL98, Optical Interconnects 2001, Photonic VLSI for Image and Information Processing 2001
- Other Activities
 OC96 Steering Committee Vice Chair, Transducer99 Planning Committee

Editorial Board

- Journal of Robotics and Mechatronics, Vol.34, No.5 (2022): Special Issue on High-Speed Vision and its Applications, Guest Editor
- Cyberpsychology, Behavior, and Social Networking, Editorial Board (2010-2017)
- Applied Optics, Vol.39, No.5 (2000): Special Issue on Optics in Computing, Feature Editor

Activity at Tokyo University of Science

- President (2022.1-)

Activity at the University of Tokyo

- Professor Emeritus (2020.6-)

Headquarter

- Executive Vice-President (2005.4-2006.3)
CTO and Director of University Corporate Relations (2005.4-2006.3)
- Vice-President (2004.4-2005.3)
Director of University Corporate Relations (2004.4-2005.3)
- Executive Advisor to the President (2002.4-2004.3)
Charge of University Corporate Relations (2002.4-2004.3), Director of Planning Office on University Corporate Relations (2002.4-2002.9), Director of University Corporate Relations (2002.9-2004.3)
- Director, Division of Public Relations (2001.4-2002.3)
- Member, Committee for Preparation of Graduate School of Information Science and Technology (2000.9-2001.3)
- Member, Liaison Office for Promotion of Information Science and Technology (1998.4-1999.3)

Graduate School of Information Science and Technology

- Dean (2016.4-2020.3)
- Director, Department of Creative Informatics (2008.4-2010.3)
- Vice Dean (2006.4-2007.3)
- Member, Committee of Planning (2002.4-2004.3)
- Director, Department of Information Physics and Computing (2001.4-2002.3)

Faculty of Engineering

- Chair, Committee of Curriculum (2001.11-2003.3)
- Vice Chair, Committee of Education (2000.4-2002.3)
- Director, Department of Mathematical Engineering and Information Physics (2001.4-2002.3)

Graduate School of Engineering

- Director, Department of Mathematical Engineering and Information Physics (2001.4-2002.3)
- Member, Committee for Planning (2000.4-2002.3)
- Director, Research Office (1999.10-2000.3)

Other Activities

Research Projects

Project Leader

- Japan Society for the Promotion of Science (JSPS), Grants-inAid for Scientific Research (S)
"Development of Next Generation Information Environment Systems Using High-speed Vision and Tracking Technology", Project Leader (2020-2024)
- Japan Science and Technology Agency (JST), MIRAI Program:
"Multidimensional Digital Twin Sensing and Reconstruction Based on High-speed Vision", Project Leader (2021-2023)
- New Energy and Industrial Technology Development Organization, Crosscutting Technology Development Project to Promote IoT
"Development of Realtime IoT System and Applications Using High-speed Vision Network", Project Leader (2017-2021)
- Japan Science and Technology Agency (JST), ACCEL:
"Applications of Intelligent Systems Using High-speed Image Processing", Project Leader (2016-2021)
- New Energy and Industrial Technology Development Organization, Clean Device Promotion Project
"Development of Large Scale High-speed Sensing System and Its Applications", Project Leader (2016)
- New Energy and Industrial Technology Development Organization, Clean Device Promotion Project
"Practical Applications of High-speed Image Processing Using High-sensitivity, High-speed, and Low Noise CMOS Imager", Project Leader (2014-2016)
- Japan Society for the Promotion of Science (JSPS), Grants-inAid for Scientific Research (S)
"High Speed Intelligent Robots Using Ultra High Speed Vision", Project Leader (2012-2016)
- Japan Science and Technology Agency (JST), Core Research for Evolutional Science and Technology (CREST):
"Dynamic Information Space based on High-speed Sensor Technology", Project Leader (2009-2014)
- Japan Society for the Promotion of Science (JSPS), Grants-inAid for Scientific Research (S)
"Expansion of Vision Chip Applications", Project Leader (2007-2011)
- Japan Science and Technology Agency (JST), Solution Oriented Research for Science and Technology (SORST):
"Synthetic Realization of Hand-Eye System Based on Sensory-Motor Integration Theory", Project Leader (2004-2009)
- Japan Society for the Promotion of Science (JSPS), Grants-inAid for Scientific Research (S)
"Ultra High Speed Recognition and Behavior System with Distributed Network Architecture", Project Leader (2002-2006)
- Japan Science and Technology Agency (JST), Core Research for Evolutional Science and Technology (CREST):
"Synthetic Realization of Hand-Eye System Based on Sensory-Motor Integration Theory", Project Leader (1999-2004)
- Sensor Fusion Project Chair, Science and Technology Agency (1991-1995)

Project Adviser

- Japan Society for the Promotion of Science (JSPS), Grant-in-Aid for Transformative Research Areas (A):
"Comprehensive Understanding of Scattering and Fluctuated Fields and Science of Clairvoyance", Adviser (2020-)
- Japan Science and Technology Agency (JST), Core Research for Evolutional Science and Technology (CREST):
"Creating Innovative Optics and Photonics Based on Creative Principles", Adviser (2019-)

- Japan Science and Technology Agency(JST), Core Research for Evolutional Science and Technology (CREST): "Technology of Dependable VLSI System", Adviser (2007-2014)
- Japan Science and Technology Agency(JST), Precursory Research for Embryonic Science and Technology (Sakigake) "Cooperation and Control", Adviser (2000-2005)

Technical Committee Member

- New Energy and Industrial Technology Development Organization: Technical Committee Member (2003.5.16-2005.3.31, 2006.10.31-2008.3.31)

Other Universities and Public Research Institutes

- Advisor, National Research Institute of Police Science (2014.4-)
- Academic Adviser, Hiroshima University (2020.4-2022.3)
- Research Advisor, The National Institute of Advanced Industrial Science and Technology (AIST) (2011.4-2017.3)
- Member, Subcommittee for Validation and Examination of Degrees, The National Institution for Academic Degrees and University Evaluation (NIAD-UE) (2010.4-2014.3)
- Guest Professor, Kanazawa Institute of Technology (2008.4-2010.3)
- Visiting Professor, Harbin Institute of Technology (1999)
- Joint Research Fellow, The National Institute for Fusion Science (NIFS) (1996.4-1998.3)
- Visiting Researcher, National Institute of Bioscience and Human-Technology, Agency of Industrial Science and Technology (AIST), Ministry of International Trade and Industry (MITI) (1996)
- Visiting Researcher, Electrotechnical Laboratory (ETL), Agency of Industrial Science and Technology (AIST), Ministry of International Trade and Industry (MITI) (1996)
- Senior Researcher as an additional post, Industrial Products Institute (IPRI), Agency of Industrial Science and Technology (AIST), Ministry of International Trade and Industry (MITI) (1989.4-1991.3)

Japanese Government

- Ibaraki Ambassador, Ibaraki Prefecture (2013.4-)
- Headquarters for Japan's Economic Revitalization, Cabinet Secretariat, Government of Japan
 - Member, Council on Promotion of Human Resource Development for the Fourth Industrial Revolution (2016.12.9-2017.12.8)
- Council for Science and Technology, Cabinet Office, Government of Japan
 - Member, Working Group of Information Communication Technology (2013.11.20-2014.9.30, 2014.12.2-2015.9.30)
 - Member, Working Group of Human Life in Local Area (2015.11.26-2016.9.30, 2016.12.1-2017.9.30)
- Member, Council for Science and Technology, The Ministry of Education, Culture, Sports, Science and Technology (MEXT)
 - Member, Committee of Industry Relations and Community Support (2013.3.15-2015.2.14)
 - Member, Committee of Industry Relations and Community Support, and Chair, Working Group of Promotion of Interaction for Innovation (2015.4.13-2017.2.14)
- Member, Information and Communications Council, Ministry of Public Management, Home Affairs, Posts and Telecommunications
 - Member, Committee for Creation of Innovation (2013.2.12-2015.1.5)
- Member, Council for Science and Technology, The Ministry of Education, Culture, Sports, Science and Technology (MEXT)
 - Member, Committee of Industry Relations and Community Support, and Chair, Working Group of Promotion of Interaction for Innovation (2013.3.15-2015.2.14)
 - Member, Committee of Promotion of Industrial-Academic-Government Cooperation, Member, Committee of Promotion of Strategic Expansion of Industrial-Academic-Government Cooperation (2007.2.1-2008.1.31, 2009.2.1-2011.1.31, 2011.2.8-2013.1.31)
 - Member, Committee of Information Science and Technology (2003.2.1-2005.1.31)
- Member, Industrial Technology Council, Ministry of Economy, Trade and Industry (METI)
 - Member, Industrial-Academic Cooperation (2003.2.1-2004.1.31)
- Science Council of Japan (SCJ)
 - Collaborative Member (2006.8.20-2008.9.30, 2011.10.3-2015.10.2)
 - Member, Committee of Common Basis of Engineering (2000.10.21-2003.10.20)

Related Companies

- Representative Director and Vice President, The Japan Association of University Intellectual Property and Technology Management (UNITT) (2004.9.30-2006.6.28)
- Director, The University of Tokyo Edge Capital Co., Ltd. (UTEC) (2004.8.2-2005.6.29)
- Director, TODAI TLO, Ltd. (2004.7.13-2006.3.24)
- Director, Foundation of Support of University-Industry Cooperation for the University of Tokyo (2004.3.8-2007.9.5)

Others

- Vice President, WINDS Network (2016.2.24-)
- President, Vision Chip Association (2001.9.1-)

8. Media Link

Media Link

General

General

- Image Sensors World "Assorted Videos: Omnivision, Omron, Polight, Woptix, Senseker, Ishikawa Lab, Bedabrata Pain" (2021.6)
- YouTube, ICRA 2021 - ONSVP Workshop Channel "Invited Talk 1 Masatoshi Ishikawa University of Tokyo" (2021.6)
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- News Release "Sony Releases a High-Speed Vision Sensor that Makes Detection and Tracking of Objects at 1,000 fps Possible Stacked CMOS Image Sensor that Combines High-Frame-Rate Imaging and High-Speed Sensing" (2017.5)
- Image Sensors World "Sony Announces 1000fps Sensor Stacked on Top of Vision Processor" (2017.5)
- I4U NEWS "NEW SONY IMX382 CMOS SENSOR TRACKS OBJECTS AT 1,000 FRAMES PER SECOND" (2017.5)
- YouTube Sony Channel "High speed vision sensor creates "High Speed Vision Sensing" world." (2017.5)
- Image Sensors World "Vision Chips at Ishikawa Watanabe Lab" (2017.3)
- EETimes "Vision chip blends detection with image processing" (1999.8)

Gesture UI

- gizmag "Kinect for Xbox demos in Tokyo, we talk with a skeptical expert. By Rick Martin" (2010.9)

Meta Perception

Optical Illusion

- Image Sensor World "Ishikawa Lab's Optical Illusion Killer" (2020.9)

High Speed Gesture UI for zSpace

- medGadget "Real-Time Touch-Free Gesture Control System for Image Browsing in The OR (VIDEO)" (2014.5)
- Polygon "High-speed 3D hand gesture interface allows users to interact with 3D holographic displays" (2014.5)
- gizmodo "Every Gestural Interface Should Be This Responsive and Snappy" (2014.5)
- Bloomberg "University of Tokyo Partners with zSpace, Inc. to Deliver Immersive Sensor and Gesture Technology" (2014.5)
- zSpace Press Release "University of Tokyo Partners with zSpace, Inc. to Deliver Immersive Sensor and Gesture Technology" (2014.5)

AIRR Tablet

- THE BRIDGE "AIRR Tablet brings us a step closer to Minority Report UI" (2014.4)
- Wall Street Daily "Japan's New Floating Touchscreen Magic Trick" (2014.4)
- Scientific American "'Floating' Screens Could Prevent Spread of Germs" (2014.4)
- Reuters "Floating" screens bring new paradigm to interactive gesture technology" (2014.4)

Invoked Computing

- CNET "New concept turns pizza boxes, bananas into computers" (2011.11)
- Popular Science "Video: An Augmented-Reality Bananaphone, With a Real Banana (or Anything Else)" (2011.11)
- Phys.org "Invoked computing: Pizza box is too loud! I can't hear the banana" (2011.11)
- Übergizmo "Invoked computing turns your pizza box into a computer, and a banana into a phone" (2011.11)
- Gizmag "New concept turns pizza boxes, bananas into computers" (2011.11)

scoreLight / Sticky Light

- Übergizmo "Sticky Light lets users interact with a laser beam" (2011.4)
- DigInfo TV "scoreLight" (2009.11)
- Übergizmo "Sticky Light project" (2009.12)
- Gizmag "scoreLight musical instrument turns drawings into sound" (2009.12)
- YouTube "Crazy Weird Lazer" (2009.8)
- YouTube "Laser + Sound test-0" (2009.8)

Volume Slicing Display

- CNET "Volume Slicing Display affords untethered 3D views" (2009.12)

Haptic Rader

- Übergizmo "Haptic Radar Project" (2008.8)
- engadet "Haptic radar system has got your back" (2006.10)

Tokyo University of Science

Office of the President

- "Message from the President" (2022.1)

University of Tokyo page

UTokyo Research

- "Starting a second decade of innovation and entrepreneurship" (2015.5)

9. Affiliated Laboratories (Universities and National Institutes / Companies)

Affiliated Laboratories (Universities and National Institutes)

- Shimojo Laboratory, The University of Electro-Communications (Prof. Makoto Shimojo)
 Shimojo Laboratory YouTube Channel
- McGill University Prof. Andrew Kirk
- Mukai Laboratory, Meijo University (Prof. Toshiharu Mukai)
- Smart Robotics Laboratory, Hiroshima University (Prof. Idaku Ishii)
- Yamamoto Laboratory, Utsunomiya University (Prof. Hirotsugu Yamamoto)
 Yamamoto Laboratory YouTube Channel
- Namiki Laboratory, Chiba University (Prof. Akio Namiki)
 Namiki Laboratory YouTube Channel
- Komuro Laboratory, Saitama University (Prof. Takashi Komuro)
 Komuro Laboratory YouTube Channel
- The University of Hong Kong (Graziano Chesi)
- Oku Laboratory, Gunma University (Prof. Hiromasa Oku)
 Oku Laboratory YouTube Channel
- Kagami Laboratory, Tohoku University (Prof. Shingo Kagami)
 Shingo Kagami YouTube Channel
- Soochow University, China (Prof. Lihui Wang)
- Extended Reality Lab, City University of Hong Kong (Assoc. Prof. Alvaro Cassinelli)
 Cassinelli Alvaro YouTube Channel
- Watanabe Laboratory, Tokyo Institute of Technology (Assoc. Prof. Yoshihiro Watanabe)
 Watanabe Laboratory YouTube Channel
- Yamakawa Laboratory, University of Tokyo
 (Assoc. Prof. Yuji Yamakawa, Asst. Prof. Masahiro Hirano, Project Asst. Prof. Hyuno Kim, Project Researcher Kenichi Murakami)
 Yamakawa Laboratory YouTube Channel
- Intelligent Robots and Systems Laboratory, Hokkaido University (Assoc. Prof. Taku Senoo)
- Harada Laboratory, Osaka University (Asst. Prof. Keisuke Koyama)
 Keisuke Koyama YouTube Channel
- Nakato Laboratory, University of Tokyo (Project Asst. Prof. Seohyun Lee)
- Hashimoto Laboratory, Tohoku University (Prof. Koishi Hashimoto)
- Dependable Systems Research Group, National Institute of Advanced Industrial Science and Technology (Yoshihiro Nakabo)
- Ishikawa Group Laboratory, Tokyo University of Science
 (Assoc. Prof. Tomohiko Hayakawa, Assoc. Prof. Leo Miyashita, Junior Assoc. Shouren Huang, Junior Assoc. Tomohiro Sueishi,
 Asst. Prof. Satoshi Tabata, Engineer Yushi Moko)
 Ishikawa Group Laboratory YouTube Channel

Affiliated Companies (Commercialization and Practical Applications)

- NEDO Project (Project Leader: Masatoshi Ishikawa, Project Member: The University of Tokyo, Sony Corp, Nissan Motor Co., Ltd, Exvion Inc.)
 - Image Sensors World "Sony Sees Bright Future for 1,000fps Sensor" (2015.9)
 - The Japan Times "Sony developing 1,000-pictures-a-second sensor" (2015.9)
 - Bussiness Finance News "Sony Corp (ADR) May Become The Pioneer Of Affordable High-End Image Sensors" (2015.9)
 - Bloomberg Bussiness "Why Sony Sees Its Next Big Hit at 1,000 Photos a Second" (2015.9)
- Exvion Inc.
 Platform for High-speed Computer Vision
 - Exvion News "Establishing a platform for developing high-speed computer vision solutions" (2017.2)
- ZKOO
 - Embedded Vision Alliance "ExVision Demonstration of a High Speed Gesture Interface System" (2016.2)
 - ZKOO by exvion "THE WORLD'S MOST RESPONSIVE AND ACCURATE GESTURE-TRACKING CAMERA" (2015.12)
- High Speed Gesture UI
 - KICKSTARTER "ZKOO - The World's Most Advanced Gesture Tracking Camera" (2015.12)
 - VentureBeat "Exvion hopes to bring your favorite mobile games to your TV" (2015.5)
 - Games In Asia "This cheap, Kinect-like gadget lets the whole family play mobile games on the living room TV" (2015.4)
 - PRWeb "BlueStacks' GamePop Introduces New Game Controller, Also Announces Gesture-based Games on TV and AiO PC" (2014.9)
 - NIKKEI TECHNOLOGY online "Venture Firm Realizes High-speed, Low-delay Gesture-based UI" (2014.9)
- zSpace

- zSpace Press Release "University of Tokyo Partners with zSpace, Inc. to Deliver Immersive Sensor and Gesture Technology" (2014.5)
 - Tokyo Electron Device Limited (TED)
 - Tokyo Electron Device Limited (TED) News "High-speed projector "DynaFlash" at the fastest level in the world is jointly developed by University of Tokyo and Tokyo Electron Device Limited – 8-bit image projection up to 1,000fps –" (2015.7)
 - Texas Instrument
 - TI E2E Community "There's more than meets the eye when designing for industrial projection" (2016.5)
 - Sony
 - Sony Corporate Info ""Spinal reflex" enables rapid feedback and response Real-time Image Data Analysis" (2020.2)
 - Sony Design "A(i)R Hockey" (2018.5)
 - News Release "Sony Releases a High-Speed Vision Sensor that Makes Detection and Tracking of Objects at 1,000 fps Possible Stacked CMOS Image Sensor that Combines High-Frame-Rate Imaging and High-Speed Sensing" (2017.5)
 - Image Sensors World "Sony Announces 1000fps Sensor Stacked on Top of Vision Processor" (2017.5)
 - I4U NEWS "NEW SONY IMX382 CMOS SENSOR TRACKS OBJECTS AT 1,000 FRAMES PER SECOND" (2017.5)
 - YouTube Sony Channel "High speed vision sensor creates "High Speed Vision Sensing" world." (2017.5)
 - Tawazun Holding
 - biz Today "Tawazun Holding and University of Tokyo sign agreement" (2017.7)
 - NEWS "Tawazun Holding and University of Tokyo sign agreement for cooperation in science and technology" (2017.7)
 - Dai Nippon Printing Co., Ltd.
 - Harmonic Drive Systems, Inc.
 - Hamamatsu Photonics K.K.
 - Barrett Technology Inc., "Sports & Game Play"
 - WOW Inc. "INORI - PRAYER-"
 - Central Nippon Expressway Company Limited
 - Oz Creative Room Limited
 - Seiko NPC Corporation
 - Vision Chip Association
- Companies by Fomer Members
- Lucida Science Communications, Inc. (Neil McArdle)
 - Emma Consulting Co., Ltd. (Dirk Ebert)

10. SNS (Facebook etc. / YouTube Channel)

SNS: Facebook, Twitter, LinkedIn

Laboratory



Ishikawa Group Laboratory Page
 (English)



Ishikawa Group Laboratory Page
 (Japanese)

Tokyo University of Science



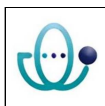
Personal



YouTube

Laboratory Sensor Fusion Dynamic Vision System System Vision Design Active Perception

Ishikawa Group Laboratory Channel



Ishikawa Group Laboratory Channel

(2023.2.28) Videos: 119, Subscribers: 8,540
 Video Views: over 9,606,000



Ishikawa Group Laboratory II Channel

(2023.2.28) Videos: 148, Subscribers: 292
 Video Views: over 34,004

Movies on our laboratory

- Labo Video 2020 (Japanese) (2021.6)
- Labo Video 2020 (English) (2021.6)
- Lab Video 2014 short (2014.7)
- High Frame Rate Videos (2014.7)
- Overview of Ishikawa Lab 1 (2012.12)
- Overview of Ishikawa Lab 2 (2012.12)
- Ishikawa Lab Video (2010.3)

Sensor Fusion: High-speed robot, Visual feedback

High-Speed Feedback with Visual, Tactile and Proximity Sensing

- Proximity Sensor Applications (2020.10)
- UAV non-stop parcel handove (2020.5)
- Marshmallow catch (2018.9)
- Paper Balloon Catch (2018.5)
- Pen Spinning (2009.11)

Throwing Batting Robot

- Dream of a Baseball Android (2014.11)
- Throwing & Batting (full ver.) (2010.1)
- Directional Hitting (2009.11)
- Throwing & Batting Robot (2009.11)
- Throwing Motion (2009.11)
- Batting Motion (2009.11)

High Speed Running Robot

- ACHIRES: Robust Running (2018.5)
- ACHIRES Ver.2 (2017.11)
- History of Project ACHIRES (2014.10)
- ACHIRES: Running Robot (2014.9)
- ACHIRES (no narration) (2014.9)

Janken (rock-paper-scissors) Robot

- Janken Robot 3rd Ver. (2015.9)
- Janken Robot 2nd Ver. (2013.11)
- Janken Robot (2012.6)

Applications of High Speed Robot Hand

- MagLinkage (2019.9)
- Dynamic Human-Robot Interaction (2018.11)
- Rubik's Cube Manipulation (2018.9)
- Thread-Rotor Manipulation (2015.11)
- Dynamic Cloth Folding (2011.5)
- 3D Catching with Tweezers (2010.1)
- High-Speed Hand (2009.11)
- Active Catching (2009.11)
- Grasping with Tweezers (2009.11)
- High-Speed Catching System (2009.11)
- High-speed Dribbling (2009.11)
- Egg Catching (2009.11)
- Knotting of a Rope (2009.11)
- Dynamic Regrasping (2009.11)

Dynamic Compensation

- Towel-like object manipulation system (2022.6)
- Dynamic Observable Contact Hand (2019.5)

Dynamic Compensation

- Human-Robot Collaboration with Dynamic Compensation (2018.8)
- Accurate Pick-and-Place (2018.2)
- Active Assistant Robot (2017.11)
- Dynamic Compensation Robot with a Vision Chip (2017.2)
- Micro Manipulation (2015.11)
- Dynamic Compensation (2015.11)
- Line Tracing (2016.6)
- Peg-in-Hole (2016.6)

Dynamic Vision System: High-speed imaging control, adaptive optics

3D HUD

- 3D HUD (2017.3)
- Dynamic projection mapping
 - VarioLight 2: Rhythmic Gymnastics (2021.4)
 - VarioLight 2 (2020.7)
 - VarioLight (2018.5)
 - Lumipen 2 (2015.3)
 - Tracking Projection Mosaicing (2020.12)
 - Golf Swing Training (2020.3)
 - Dynamic Projection Mapping (2017.3)
 - Lumipen (2013.6)
 - High-Speed Focal Tracking Projection (2020.8)
 - Dynamic Depth-of-Field Projection Mapping (2019.4)
 - Lumipen 2 (2015.9)
 - High-Speed Interaction (2013.5)
- High-Speed Tracking System
 - Swimming Fish Tracking (2020.9)
 - 1ms Auto Pan-Tilt; Yo-yo Ver. (2013.10)
 - Shock-wave by Tracking BOS (2017.5)
 - 1ms Auto Pan-Tilt (2012.7)
 - VibroTracker (Revised Video) (2014.7)
 - Saccade Mirror (2011.10)
- High-Speed Variable Focus Lens, Focus Stacked Movie
 - Variable Focus Lens (2015.3)
 - Dynamorph Lens (2010.4)
 - A high-speed liquid lens (2010.9)
 - Focus Stacked Movie (2010.4)
- Micro Visual Feedback
 - 3D Tracking of a Paramecium (2010.4)
 - Tracking of a Spermatozoon (2010.4)

System Vision Design: High-speed image processing and its application

- Vision Chip
 - History of Vision Chip (2017.3)
 - ISSCC 2017 Vision Chip Demo (2017.2)
- Input/Output interface / High-speed Display / Dynamic projection mapping
 - 1000fps 24bit color projector (2021.4)
 - Brodingnagian Glass (2019.11)
 - DynaFlash v2 (2018.3)
 - Phyxel (2016.8)
 - 3D motion sensing (2015.10)
 - 3D Input for Mobile Devices (2009.11)
 - ElaMorph Projection (2020.11)
 - MIDAS Projection (2018.11)
 - SENSECASE (2017.4)
 - ZoeMatrope (2016.7)
 - DynaFlash (2015.7)
 - Deformable Workspace (2009.11)
 - Dynamic Viewpoint (2020.3)
 - Portable Lumipen (2018.7)
 - Dynamic Projection Mapping (2016.10)
 - Occlusion-Robust 3D Sensing (2016.5)
 - Anywhere Surface Touch (2014.4)
- Book Flipping Scanning
 - BFS-Solo (2013.1)
 - BFS-Auto (2012.11)
 - Book Flipping Scanning (2010.3)
- High-Speed Image Sensing
 - High-speed 3D Sensing (2016.8)
 - Human Gait Estimation (2012.3)
 - High-speed roll camera (2016.5)
 - Shape Measurement (2009.11)
 - Rapid SVBRDF Measurement (2015.5)

Active Perception: Interactive interface, Media control

- Active Perception & its application
 - Tunnel inspection system (2017.4)
- High-Speed Gesture UI
 - Latency Limits (2020.2)
 - High Speed Gesture UI (2013.9)
 - Gesture UI for zSpace (2014.5)
 - AIRR Tablet (2014.3)
- Smart Laser Scanner and Its Applications
 - 3D Smart Laser Scanner (2010.9)
 - Human Computer Interface (2010.9)
 - Sensing Display (2010.9)
 - Map browsing (2010.9)
 - Video browsing (2010.9)
- Meta Display
 - Bilateral Motion Display (2020.9)
 - Volume Slicing Display (2010.9)
 - Optical Illusions Compensator (2020.9)
 - Haptic Radar (2010.9)
 - scoreLight (2010.9)
 - The Khronos Projector (2010.9)

Our Videos introduced in the IEEE Spectrum Channel

- High-speed, Small-deformation Catching of Soft Objects (2019.6)
- Automatic Page Turner Machine (2019.6)
- Book Flipping Scanning (2010.3)

YouTube Pages where our researches are introduced. (2023.2.28)

Our movies in the Ishikawa Group Laboratory channel --> "Popular uploads" page in the laboratory channel					
• Janken Robot (2012.6)	4,285,000	• BFS-Auto (2012.11)	1,276,000	• Dynamic Projection Mapping (2016.10)	988,000
• Janken Robot 2nd Ver. (2013.11)	859,000	• Janken Robot 3rd Ver. (2015.9)	307,000	• Running Robot (2014.9)	243,000
• 1ms Auto Pan-Tilt (2012.7)	169,000	• Book Flipping Scanning (2010.3)	165,000	• 3D Input Interface (2009.11)	94,000
• DynaFlash (2015.7)	90,000	• DynaFlash v2 (2018.3)	72,000	• Lumipen 2 (2015.3)	71,000
• BFS-Solo (2013.1)	69,000	• Gesture UI for zSpace (2014.5)	66,000	• AIRR Tablet (2014.3)	52,000
• Lumipen (2013.6)	44,000	• Rubik's Cube Robot (2018.9)	38,000	• MIDAS Projection (2018.11)	29,000
• High-Speed Interaction (2013.5)	27,000	• scoreLight (2010.9)	26,000	• MagLinkage (2019.9)	25,000

• Auto Pan-Tilt; Yo-yo (2013.10)	21,000	• Baseball Android (2014.11)	21,000	• ZoeMatrope (2016.7)	21,000
• ACHIRES Ver.3 (2018.5)	20,000	• Portable Lumipen (2018.7)	18,000	• ACHIRES Ver.2 (2017.11)	16,000
• Batting Motion (2009.11)	15,000	• ACHIRES (no narration) (2014.9)	12,000	• Smart Laser Projector (2010.9)	11,000
• The Khronos Projector (2010.9)	11,000	• Focus Stacked Movie (2010.4)	10,000	• Anywhere Surface Touch (2014.4)	10,000
Our movies in other channels					
• High-Speed Robot Hand (2009.8)	4,010,000	• High-Speed Robot Hand (2009.7)	1,027,000	• Laser + Sound test-0 (2009.8)	1,001,000
• Crazy Weird Lazer (2009.8)	852,000	• New Input Interface (2009.7)	212,000	• Baseball Robots (2009.7)	95,000
• High-speed Hand (2009.4)	86,000	• Ultra High-speed Robot (2012.10)	46,000	• Baseball Robots (2009.7)	33,000
• Batting & Throwing (2009.7)	28,000	• Highspeed-Scanner (2010.3)	27,000	• Book Scanning System (2009.8)	27,000
• Janken Robot (2012.6)	23,000	• Folding Cloth Robot (2011.5)	23,000	• High Speed Robot (2009.8)	12,000
• High Speed Robot Hand (2009.8)	11,000				
Videos on our Researches Introduced in Other Channels					
• Tracking & Lumipen (2013.6)	511,000	• Invoked Computing (2011.11)	76,000	• Janken robot 2nd Ver. (2013.11)	63,000
• Janken Robot 2nd Ver. (2013.11)	54,000	• scoreLight (2009.11)	29,000	• Invoked Computing (2011.11)	21,000
• Janken robot (2013.11)	17,000	• Janken robot (2012.6)	14,000	• scoreLight (2009.11)	12,000
• Janken Robot (2014.10)	11,000				
Total views in this list					17,502,000 (2023.2.28)

<reference> Application Systems Developed by Others Using Our Technology

• INORI - PRAYER- (2017.3)	1,564,000	• INORI - PRAYER- (2017.3)	128,000	• Making of INORI (2017.3)	68,000
• Sony IMX382 (2017.5)	59,000				

Masatoshi Ishikawa – Activities 2025

15th Version 2025.5.1

Publication Masatoshi Ishikawa
Tokyo University of Science
