

Curriculum Vitae

Dr. Norifumi KAWABATA

Assistant Professor
Emerging Media Initiative, Kanazawa University

January 7, 2026

1 Affiliation

Assistant Professor, Emerging Media Initiative, Kanazawa University, Kanazawa-shi, 920-1192 Japan
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Personal Webpage: <https://en.norifumik.nagoya>
Workspace Webpage: <https://www.emi.kanazawa-u.ac.jp>

2 Academic & Professional Experience

- April 2025 – present
Assistant Professor, Emerging Media Initiative, **Kanazawa University**
- May 2024 – March 2025
Principal Investigator,
Education and Research Division of Mathematical and Data Science / Research Division of Computational Imaging / Industry-Academia Cooperative Research Division, **Computational Imaging Lab**
- April 2024 – April 2024
Associate Professor, Department of Information Engineering, Faculty of Information Engineering,
Kanazawa Gakuin University
- April 2023 – April 2024
Associate Professor,
Department of Economic Informatics, Faculty of Economic Informatics, **Kanazawa Gakuin University**
- April 2022 – March 2023
Principal Investigator,
Education and Research Division of Mathematical and Data Science / Research Division of Computational Imaging / Industry-Academia Cooperative Research Division, **Computational Imaging Lab**
- October 2021 – March 2022
Specially Appointed Assistant Professor,
Education and Research Center for Mathematical and Data Science, **Hokkaido University**
- August 2021 – September 2021
Assistant Technical Staff, Medical IT Center, Center for Healthcare Information Technology (C-HiT),
Tokai National Higher Education and Research System (THERS), **Nagoya University Hospital**
- April 2019 – July 2021
Assistant Professor,
Department of Information Sciences, Faculty of Science and Technology, **Tokyo University of Science**
- April 2018 – March 2019
Assistant Technical Staff,
Research Division of Transportation and Information System, Institutes of Innovation for Future Society,
Nagoya University
- April 2017 – March 2018
Research Fellow, Center for Frontier Medical Engineering (CFME), **Chiba University**

3 Academic Background

- April 2013 – March 2017
Miyao Laboratory, Information Platform Group, Department of Information Engineering, Graduate School of Information Science, **Nagoya University**
- April 2011 – March 2013
Horita Laboratory, (Media Information and Communication Technology (MICT)), Department of Intellectual Information Engineering, Graduate School of Science and Engineering for Education, **University of Toyama**
- April 2007 – March 2011
Department of Intellectual Information Engineering, Faculty of Engineering, **University of Toyama**
- March 2007
Seiryō High School, General Course Graduation

4 Academic Degree

- March 2017, Ph.D. of Information Science in Nagoya University
- March 2013, Master of Engineering in University of Toyama
- March 2011, Bachelor of Engineering in University of Toyama

5 Research Field

- Information Engineering, Information Science, Computer Science
- Multi-view 3D Image and Video, Three-dimensional Image Processing, Three-dimensional Display
- 3DCG, Computational Imaging, Texture Informatics
- Image Media Quality, Visual Media Processing, Visual Information Science
- Image and Signal Processing, Digital Watermarking, Sparse Coding
- Color Information Science and Engineering, Colorization, Color Management
- Picture Coding / Image Media Processing, Super-resolution, 360 Degrees Image and Video
- Multivariate Analysis, Data Mining, Machine Learning
- Human Interface and Interaction, Human Factor, Medical Virtual Reality
- Medical System, Healthcare Informatics, Medical Imaging

6 Teaching and Research Experience

- April 2025 – present
Assistant Professor,
Emerging Media Initiative, Kanazawa University
Education and Research on Signal and Media Processing Based on Computer Science.
- May 2024 – March 2025
Principal Investigator,
Education and Research Division of Mathematical and Data Science / Research Division of Computational Imaging / Industry-Academia Cooperative Research Division, Computational Imaging Lab
Research on Imaging and Computer Science.

- April 2024 – April 2024

Associate Professor,

Department of Information Engineering, Faculty of Information Engineering, Kanazawa Gakuin University
Education and Research on Computer Engineering (Signal Processing).

- April 2023 – April 2024

Associate Professor,

Department of Economic Informatics, Faculty of Economic Informatics, Kanazawa Gakuin University
Education and Research on Multimedia Signal Processing towards Economic Informatics.

- Computer Basic Exercises I a/b
- Computer Basic Exercises II a/b
- Programming Basis a/b
- Programming I a/b
- Programming III a/b
- Programming IV a/b
- Database I
- Database II
- Fundamental Seminar I
- Fundamental Seminar II

- April 2022 – March 2023

Principal Investigator,

Education and Research Division of Mathematical and Data Science / Research Division of Computational Imaging / Industry-Academia Cooperative Research Division, Computational Imaging Lab
Research on Imaging and Computer Science.

- Computational Imaging Lab Information Platform (Mathematical and Data Science Program, Application and Basis (Data Science Basis))
- Computational Imaging Lab Information Platform (Mathematical and Data Science Program, Application and Basis (Data Engineering Basis))
- Computational Imaging Lab Information Platform (Mathematical and Data Science Program, Application and Basis (AI Basis))

- October 2021 – March 2022

Specially Appointed Assistant Professor,

Education and Research Center for Mathematical and Data Science, Hokkaido University
Education and Research for Mathematical and Data Science.

- MDS Platform (Clustering such as Regression Analysis, Hierarchical Clustering, Non-hierarchical Clustering, Naive Bayes Method, and Support Vector Machine Method)
- MDS Platform (Optimization)

- August 2021 – September 2021

Assistant Technical Staff,

Medical IT Center, Nagoya University Hospital

A Study Support on Medical Information System to Smart Hospital.

- April 2019 – July 2021

Assistant Professor,

Department of Information Sciences, Faculty of Science and Technology,
Tokyo University of Science

Education and Research on computer sciences to the bio-medical science and technology field.

- Introduction to Computer Systems and its Exercises (UNIX, Internet, TeX, C Language Programming)

- Experiments in Information Sciences I (OCaml)
- Exercises in Information Sciences I (Java)
- Experiments in Information Sciences II (PBL)
- Exercises in Information Sciences II (Application of C Language Programming, Network Programming, SQL, PHP, JavaScript, Multimedia, Embedded System, Image Processing)
- Experiments in Information Sciences III
- Exercises in Information Sciences III
- Advanced Studies and Researches (Group Meeting, Image Processing Seminar, Skill Seminar, Journal Club)

- April 2018 – March 2019
Assistant Technical Staff,
Research Division of Transportation and Information Systems, Institutes of Innovation for Future Society, Nagoya University
 - Research Technical Assistance on Transportation and Information Systems in the Next Generation Mobility Society
- April 2017 – March 2018
Research Fellow,
Center for Frontier Medical Engineering, Chiba University
 - Education and Research on developing the Medical Support System using Virtual Reality System and Medical Image Engineering in Nakaguchi Laboratory.
- April 2014 – March 2015
Teaching Staff, School of Culture-Information Studies, Sugiyama Jogakuen University
 - Video and Animation Production (April 2014 – September 2014)
 - Graphics Design (October 2014 – March 2015)
- October 2013 – March 2014
Research Assistant, Graduate School of Information Science, Nagoya University
 - Outstanding Graduate COE support subsidy
- April 2013 – September 2013
Teaching Assistant, Nagoya University
 - Fundamental Seminar A (for Information Platform, Usability)
- October 2011 – March 2012
Teaching Assistant, University of Toyama
 - Liberal Principles of Exercise (C Language)

7 Qualification

- Mental calculation Grade 1
- Calculation on the Abacus Test Semi-first Step Grade
- Calligraphy First Step Grade
- The EIKEN Test in Practical English Proficiency Grade 2
- Car Driver License for Standard Vehicle

- High School Teacher Class 1 License (Industrial)
- High School Teacher Specialized License (Industrial)
- TOEIC 620
- IT Passport (DX promotion passport 1)
- JDLA Deep Learning for GENERAL (DX promotion passport 2)
- CG-ARTS Certification Multimedia Certification Basic

8 Technical Skill

8.1 Programming Languages

- C / Visual C++ / C#
- Java
- OCaml / ML
- LISP
- Assembly
- PHP
- Python
- R
- JavaScript
- HTML5 / CSS3

8.2 Tools

- MATLAB
- Scilab
- OpenCV
- Autodesk Maya
- Blender
- Unity
- Adobe Photoshop
- Adobe Premiere
- Adobe After Effect
- JM / High Efficiency Video Coding Software

9 Research Fund, Grant, and Scholarship

- FY2023
Traveling abroad Travel Expenses Assistance in the Telecommunications Advancement Foundation (IWAIT 2024)
- FY2023
Education and Research Fund for Faculty Member in Kanazawa Gakuin University
- FY2021
Education and Research Fund for Faculty Member in Tokyo University of Science
- FY2020
Education and Research Fund for Faculty Member in Tokyo University of Science
- FY2019
Education and Research Fund for Faculty Member in Tokyo University of Science
- FY2017
Traveling abroad Travel Expenses Assistance in the Telecommunications Advancement Foundation (IWAIT 2018)
- FY2016
Support Grant for Student to participate in the International Conference by ITE (ITC-CSCC 2016)
- FY2016
Scholarship for Ph.D. Student because of having the academic excellent result and submitting the doctor thesis
- FY2015
Research Grant for Ph.D. Student in Nagoya University
- FY2014
Research Grant for Ph.D. Student in Nagoya University
- FY2013
Outstanding Graduate COE Support Subsidy in Nagoya University

10 Affiliated Society, Contribution to Society

10.1 Affiliated Society

- The Institute of Image Information and Television Engineers (ITE)
(Member, from February 2011)
- The Institute of Electronics, Information and Communication Engineers (IEICE)
(Member, from August 2013)
- The Institute of Electrical and Electronics Engineers (IEEE)
(Member, from February 2014)
 - IEEE Signal Processing Society (IEEE SPS)
(Member, from February 2014)
 - IEEE Engineering in Medicine & Biology Society (IEEE EMBS)
(Member, from October 2020)
 - IEEE Computer Society (IEEE CS)
(Member, from October 2020)
- The Institute of Image Electronics Engineers of Japan (IIEEJ)
(Member, from April 2015)

- The Institute of Information Processing Society of Japan (IPSJ)
(Member, from January 2017)
- The Japanese Society of Medical Imaging Technology (JAMIT)
(Member, from April 2018)
- The Japan Society of Computer Aided Surgery (JSCAS)
(Member, from July 2018)
- The International Society for Optical Engineering (SPIE)
(Early Career Professional Member, from June 2020)
- Japan Association for Medical Informatics (JAMI)
(Member, from August 2021)
- Society for Imaging Science and Technology (IS&T)
(Member, from December 2021)
- The Japan Data Scientist Society
(Member, from June 2025)

10.2 Committee Experience

- Councilor, Japan Society of Computer Aided Surgery (JSCAS) (two term, November 2025 – present)
- Technical Programme Member, The 32nd International Conference on Multimedia Modeling (**MMM 2026**)
(August 2025 – present)
- Session Chair, *2025 8th International Conference on Blockchain Technology and Applications (ICBTA2025)* (December 2025 – December 2025)
- Technical Committee, *2025 8th International Conference on Blockchain Technology and Applications (ICBTA2025)* (November 2025 – December 2025)
- Technical Programme Member, The 31st International Conference on Multimedia Modeling (**MMM 2025**)
(August 2024 – January 2025)
- Councilor, Japan Society of Computer Aided Surgery (JSCAS) (one term, December 2023 – November 2025)
- Panel of judges, *R.5 IEICE Hokuriku Section Excellent Student Paper Award* (August 2023 – September 2023)
- Proctor, *International Collegiate Programming Contest (ICPC 2019) Asia Yokohama Regional Online First Round Contest* (July 2019 – July 2019)

10.3 Review Experience

- Reviewer, *2025 8th International Conference on Blockchain Technology and Applications (ICBTA2025)*
(from November 2025 to December 2025, by twice)
- Reviewer, *2025 IEEE International Conference on Visual Communications and Image Processing (VCIP2025)*
(from July 2025 to December 2025, by five times)
- Reviewer, *Circuits, Systems, and Signal Processing (CSSP)*
(from October 2025, by once)
- Reviewer, *IPSJ Journal*
(from June 2025, by once)
- Reviewer, *Journal of Perceptual Imaging (JPI)*
(from June 2025, by once)

- Reviewer, *The 19th Machine Vision Applications* (MVA 2025)
(from April 2025 to July 2025, by fourth times)
- Reviewer, *IoT*
(from February 2025, by once)
- Reviewer, *Frontiers of Computer Science*
(from December 2024, by once)
- Reviewer, *Biomimetics*
(from October 2024, by once)
- Reviewer, *IEEE Sensors Letters*
(from September 2024, by once)
- Reviewer, *The 31st International Conference on Multimedia Modeling* (MMM 2025)
(from August 2024 to January 2025, by Seven times)
- Reviewer, *International Journal of Imaging Systems and Technology*
(from August 2024, by once)
- Reviewer, *IEEE Transactions on Geoscience and Remote Sensing*
(from July 2024, by once)
- Reviewer, *2024 IEEE International Conference on Visual Communications and Image Processing* (VCIP2024)
(from July 2024 to December 2024, by five times)
- Reviewer, *PeerJ Computer Science*
(from July 2024, by once)
- Reviewer, *Remote Sensing*
(from July 2024, by once)
- Reviewer, *Neural Networks*
(from June 2024, by once)
- Reviewer, *IEEE Consumer Electronics Magazine*
(from May 2024, by once)
- Reviewer, *IEEE Transactions on Pattern Analysis and Machine Intelligence* (PAMI)
(from May 2024, by once)
- Reviewer, *Electromagnetic Science*
(from April 2024, by once)
- Reviewer, *IEEE Transactions on Information Forensics & Security* (T-IFS)
(from January 2024, by three times)
- Reviewer, *IEEE Transactions on Computational Imaging* (TCI)
(from January 2024, by once)
- Reviewer, *The 2nd International Conference on Computer Graphics and Image Processing* (CGIP2024)
(from December 2023 to January 2024, by three times)
- Reviewer, *IEEE Transactions on Intelligent Vehicles*
(from October 2023, by once)
- Reviewer, *Chinese Optics Letters*
(from October 2023, by once)
- Reviewer, *IEEE Transactions on Pattern Analysis and Machine Learning* (PAMI)
(from September 2023, by once)

- Reviewer, *IEEE Transactions on Artificial Intelligence (TAI)*
(from September 2023 to now, by once)
- Reviewer, *Computers in Biology and Medicine (CBM)*
(from September 2023 to now, by second)
- Reviewer, *IEEE Transactions on Industrial Informatics (TII)*
(from August 2023 to now, by once)
- Reviewer, *Big Data and Cognitive Computing (BDCC)*
(from July 2023 to now, by once)
- Reviewer, *EURASIP Journal on Advances in Signal Processing*
(from June 2023 to now, by once)
- Reviewer, *International Journal of Environmental Research and Public Health*
(from February 2023 to now, by once)
- Reviewer, *IET Image Processing*
(from February 2023 to now, by once)
- Reviewer, *Nonlinear Theory and Its Applications, IEICE (NOLTA)*
(from January 2023 to now, by once)
- Reviewer, *IEEE Transactions on Consumer Electronics (TCE)*
(from December 2022 to now, by once)
- Reviewer, *Disaster Medicine and Public Health Preparedness (DMP)*
(from November 2022 to now, by once)
- Reviewer, *ACM Transactions on Privacy and Security (TOPS)*
(from July 2022 to now, by once)
- Reviewer, *IEICE Transactions on Information and Systems (JPN Edition, in Japanese)*
(from June 2022 to now, by once)
- Reviewer, *Discrete Dynamics in Nature and Society*
(from June 2022 to now, by once)
- Reviewer, *IEICE Transactions on Communications (JPN Edition, in Japanese)*
(from June 2022 to now, by once)
- Reviewer, *IEEE Transactions on Emerging Topics in Computational Intelligence*
(from February 2022 to now, by once)
- Reviewer, *IEEE Transactions on Dependable and Secure Computing*
(from February 2022 to now, by second)
- Reviewer, *IEICE Electronics Express*
(from December 2021 to now, by three times)
- Reviewer, *Tomography*
(from October 2021 to now, by twice)
- Reviewer, *Advanced Intelligent Systems*
(from October 2021 to now, by once)
- Reviewer, *IPSJ Transactions on Consumer Devices & Systems*
(from October 2021 to now, by once)
- Reviewer, *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*
(from October 2021 to now, by four times)

- Reviewer, *Multimedia Systems (MMSJ)*
(from September 2021 to now, by six times)
- Reviewer, *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*
(from June 2021 to now, by second)
- Reviewer, *IEEE Signal Processing Letters (SPL)*
(from May 2021 to now, by second)
- Reviewer, *Optical Review*
(from May 2021 to now, by five times)
- Reviewer, *IEEJ Transactions on Electrical and Electronic Engineering*
(from April 2021 to now, by once)
- Reviewer, *Signal, Image and Video Processing (SIVP)*
(from April 2021 to now, by four times)
- Reviewer, *IEICE Transactions on Information and Systems*
(from April 2021 to now, by four times)
- Reviewer, *Journal of the Society for Information Display (J. SID)*
(from June 2020 to now, by twice)
- Reviewer, *Sensors (SENSC9)*
(from February 2020 to now, by twice)
- Reviewer, *Journal of the Institute of Electrical Engineers of Japan C*
(from October 2019 to now, by seven times)
- Reviewer, *APSIPA Transactions on Signal and Information Processing*
(from September 2019 to now, by once)
- Reviewer, *IEEE Journal on Emerging and Selected Topics in Circuits and Systems (IEEE JETCAS)*
(from August 2019 to now, by once)
- Reviewer, *Electronics (ELECGJ)*
(from July 2019 to now, by five times)
- Reviewer, *IEEE Journal of Biomedical and Health Informatics (JBHI-EMBS)*
(from July 2019 to now, by eleventh times)
- Reviewer, *Multimedia Tools and Applications (MTAP)*
(from March 2019 to now, by twenty one times)
- Reviewer, *Neurocomputing (NEUCOM)*
(from February 2019 to now, by seven times)
- Reviewer, *Symmetry (SYMMAM)*
(from January 2019 to now, by three times)
- Reviewer, *Applied Sciences (Applsci)*
(from July 2018 to now, by eleventh times)
- Reviewer, *IEEE Access*
(from July 2018 to now, by twenty four times)
- Reviewer, *Journal of Imaging (J. Imaging)*
(from June 2018 to now, by three times)
- Reviewer, *IEEE Transactions on Circuits and Systems II: Express Briefs (TCAS-II)*
(from February 2018 to now, by five times)

- Reviewer, *IEEE Transactions on Circuits and Systems I: Regular Papers (TCAS-I)* (from February 2018 to now, by four times)
- Reviewer, *Journal of Imaging Science and Technology (JIST)* (from February 2018 to now, by sixteen times)
- Reviewer, *IEEE Transactions on Medical Imaging (TMI)* (from January 2018 to now, by five times)
- Reviewer, *Signal Processing (SigPro)* (from January 2018 to now, by three times)
- Reviewer, *SPIE Journal of Electronic Imaging (JEI)* (from December 2017 to now, by four times)
- Reviewer, *IEEE Transactions on Image Processing (TIP)* (from December 2017 to now, by twenty third)
- Reviewer, *EURASIP Journal on Image and Video Processing (JIVP)* (from December 2017 to now, by four times)
- Reviewer, *IEEE Transactions on Multimedia (TMM)* (from September 2017 to now, by forty first)
- Reviewer, *IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)* (from June 2017 to now, by thirty nine times)

11 Awards

- [1]. **“2025 8th International Conference on Blockchain Technology and Applications (ICBTA2025) Certificate of Appreciation,”** For his achievements in chairing the following session: Onsite Session I: Data Privacy and Information Security Protection Mechanisms, December 12-14, 2025.
- [2]. **“2024 TPAMI Reviewer Certificate, IEEE Transactions on Pattern Recognition and Machine Intelligence (TPAMI),”**
This certificate is awarded in recognition of the recipient's efforts as a peer reviewer.
September 26, 2025.
- [3]. **“2024 TDSC Reviewer Certificate, IEEE Transactions on Dependable and Secure Computing (TDSC),”**
This certificate is awarded in recognition of the recipient's efforts as a peer reviewer.
September 26, 2025.
- [4]. **“The international society for optics and photonics, SPIE Journal of Electronic Imaging, Certificate of Appreciation,”**
for serving as a reviewer for Journal of Electronic Imaging during the calendar year of 2024,
January 7, 2025.
- [5]. **“The international society for optics and photonics, SPIE Journal of Electronic Imaging, Certificate of Appreciation,”**
for serving as a reviewer for Journal of Electronic Imaging during the calendar year of 2023,
January 4, 2024.
- [6]. **“The international society for optics and photonics, SPIE Journal of Electronic Imaging, Certificate of Appreciation,”**
for serving as a reviewer for Journal of Electronic Imaging during the calendar year of 2018,
February 6, 2019.
- [7]. **“Elsevier Signal Processing Certificate of Outstanding Contribution in Reviewing,”**
in recognition of the contributions made to the quality of the journal in April 2018,
June 25, 2018.

- [8]. “Certificate of Appreciation for serving as a reviewer for Journal of Electronic Imaging during the calendar year of 2017,” February 17, 2018.
- [9]. “Forum on Information Technology (FIT2016) FIT Encouragement Award 2016,” Gofuku Campus, Univ. of Toyama (Presentation, Sept. 7, 2016), September 9, 2016.
- [10]. “IEICE Tokai Section Student Award (Doctor),” “A Study of the 3D CG Image Quality Metrics with 8 Viewpoints Parallax Barrier Method,” Castle Plaza Nagoya, June 3, 2015.

12 Achievement

12.1 Peer-reviewed Journal Papers

- [1]. **Norifumi Kawabata**, “Statistical Analysis of Questionnaire Survey on the Assessment of 3D Video Clips,” *Displays*, Vol.71, 102110, January 2022.
- [2]. **Norifumi Kawabata** and Masaru Miyao, “Multi-view 3D CG Image Quality Assessment for Contrast Enhancement Based on S-CIELAB Color Space,” *IEICE Transactions on Information and Systems*, Vol. E100-D, No. 07, pp. 1448–1462, July 2017.
- [3]. **Norifumi Kawabata** and Yuukou Horita, “Statistical Analysis of Subjective Assessment for 3D CG Images with 8 Viewpoints Lenticular Lens Method,” *IIEEE Transactions on Image Electronics and Visual Computing*, Vol. 4, No. 2, pp. 101–113, December 2016.
- [4]. **Norifumi Kawabata** and Masaru Miyao, “3D CG Image Quality Metrics by Regions with 8 Viewpoints Parallax Barrier Method,” *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, Vol. E98-A, No. 08, pp. 1696–1708, August 2015.

12.2 Peer-reviewed International Conference Papers or Proceedings

- [5]. **Norifumi Kawabata**, “3D CG Object Image Quality Assessment and Analysis for Glossy and Painted Based on Material Data Set of the Shitsukan Perception Standard Problem,” *Image Quality and System Performance (IQSP XXIII) (Electronic Imaging Symposium (EI2026))*, vol.23, IQSP-xxx, 6 pages, Hyatt Regency San Francisco Airport, Burlingame, CA USA, March 2026 (Accepted).
- [6]. **Norifumi Kawabata**, “Discussion on Introduction of Quantum Information and Computational Science in the Image Data Compression Procedure of 360 Degrees Camera,” *Proc. of The 29th International Workshop on Advanced Image Technology (IWAIT2026)*, 6 pages, Howard Plaza Hotel Kaohsiung, Kaohsiung, Taiwan, January 2026 (Accepted).
- [7]. **Norifumi Kawabata**, “Subjective Quality Assessment for Cross Reality of 3D CG Projected Video on a Holographic Display Prototype,” *Proc. of The 32nd International Display Workshops (IDW’25), Workshop on 3D/Hyper-Realistic Displays and Systems (3D), Cognitive Science of 3D Systems, Special Topics of Automotive Displays*, 3D3/VHF2, pp.812–815, International Conference Center Hiroshima, Hiroshima, Japan, December 2025.
- [8]. **Norifumi Kawabata**, “3D CG HEVC Images Attention Mechanism Based on Vision Transformer,” *Proc. of The 33rd Color and Imaging Conference (CIC33)*, P-13, 6 pages, Hong Kong Science Park, Hong Kong, October 2025.
- [9]. **Norifumi Kawabata**, “3D CG Image Quality Assessment in Vision and Language Based on Stable Diffusion,” *Image Quality and System Performance (IQSP XXII) (Electronic Imaging Symposium (EI2025))*, vol.22, IQSP-243, 5 pages, Hyatt Regency San Francisco Airport, Burlingame, CA USA, February 2025.

[10]. **Norifumi Kawabata**, “Image Quality Metrics for Cross Reality Considering Image Region and Perspective Based on 360 Degrees Camera,” *Proc. of The 31st International Display Workshops (IDW’24), Workshop on 3D/Hyper-Realistic Displays and Systems, (Emerging Technologies for 3D/Hyper-Realistic Display)*, 3Dp2-7, pp.806–809, Sapporo Convention Center, Sapporo, Japan, December 4-6, 2024.

[11]. **Norifumi Kawabata**, “HEVC Image Evaluation and Analysis between Contrast and Rotation Based on Material Data Set of the Shitsukan Perception Standard Problem,” *Proc. of 2024 IEEE 13th Global Conference on Consumer Electronics (GCCE 2024)*, POS3B-23, 2 pages, Asia Pacific Import Mart (AIM) Medium Exhibition Hall, Kokura, Japan, October 29 – November 1, 2024.

[12]. **Norifumi Kawabata**, “Evaluation of 3D CG Image Colorization Quality Using Visible Digital Watermarking after Noise Removal Based on Sparse Dictionary Learning,” *Proc. of The 39th International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC2024)*, POSIII-21, 6 pages, Okinawa Institute of Science and Technology Graduate University (OIST), Okinawa, Japan, July 2-5, 2024.

[13]. **Norifumi Kawabata**, “ROI Estimation of Laparoscopic Image Including Contrast Enhancement Based on Saliency Map,” *Proc. of The 27th International Workshop on Advanced Image Technology (IWAIT2024)*, 7A2 (Image/Video Compression), 6 pages, Parkroyal Langkawi Resort, Langkawi, Malaysia, January 7-8, 2024 (Traveling Abroad Travel Expenses Assistance in the Telecommunications Advancement Foundation).

[14]. **Norifumi Kawabata**, “HEVC Subjective and Objective Image Quality Assessment Considering Cross Reality Based on 360 Degrees Camera,” *Proc. of The 30th International Display Workshops (IDW’23), Workshop on 3D/Hyper-Realistic Displays and Systems (Human Factor on Realistic Display)*, 3D2/3DSA2, pp.642–645, TOKI MESSE Niigata Convention Center, Niigata, Japan, December 6-8, 2023.

[15]. **Norifumi Kawabata** and Toshiya Nakaguchi, “Optimal Design of Color Laparoscopic Super-Resolution Image Quality Based on Generative Adversarial Networks,” *Proc. of The 2023 International Conference on Computer Graphics and Image Processing (CGIP 2023)*, S2-6, 7 pages, Takanawa Campus, Tokai Univ., Tokyo, Japan, January 13-16, 2023.

[16]. **Norifumi Kawabata**, “3D CG Image Region of Interest Estimation and Visual Attention Based on Saliency Map,” *Proc. of The 29th International Display Workshops (IDW’22), Workshop on Applied Vision and Human Factors (Image Quality)*, VHFp1-6L, pp.709–710, Fukuoka International Congress Center, Fukuoka, Japan (Hybrid), December 14-16, 2022.

[17]. **Norifumi Kawabata**, “Data Set Production and Evaluation for Semantic Segmentation of 3D CG Images by H.265/HEVC,” *Proc. of The Eleventh International Workshop on Image Media Quality and its Applications (IMQA2022)*, pp.107–113, Online (Campus Plaza Kyoto, Kyoto, Japan), March 3-4, 2022.

[18]. **Norifumi Kawabata**, “Visualization for Texture Analysis of the Shitsukan Research Database Based on Luminance Information,” *Image Quality and System Performance (IQSP XIX) (Electronic Imaging Symposium (EI2022))*, vol.19, IQSP-198, pp.1–6, Online (San Francisco, CA, USA), January 16-20, 2022.

[19]. **Norifumi Kawabata** and Toshiya Nakaguchi, “Color Laparoscopic High-Definition Video Quality Assessment for Super-Resolution,” *Proc. of The 25th International Workshop on Advanced Image Technology (IWAIT2022)*, 7A5, pp.1–6, The Hong Kong Polytechnic Univ., Hong Kong (Hybrid), January 4-6, 2022.

[20]. **Norifumi Kawabata**, “3D CG Image Noise Removal and Quality Assessment Based on Sparse Dictionary Learning,” *Proc. of The 2021 IEEE 3rd Global Conference on Life Sciences and Technologies (LifeTech 2021)*, OS-AIT1-3 (Advanced Image Technology in Applied Life Science: IoT & Deep Learning Perspectives), pp.225–226, Nara Royal Hotel, Nara, Japan (Hybrid), March 9-11, 2021.

[21]. **Norifumi Kawabata** and Toshiya Nakaguchi, “Color Laparoscopic Image Region Segmentation after Contrast Enhancement Including SRCNN by Image Regions,” *Proc. of SPIE (The International Forum on Medical Imaging in Asia (IFMIA2021))*, no.85, 6 pages, National Taiwan Univ. of Science and Technology, Taiwan (Online), January 24-26, 2021.

[22]. **Norifumi Kawabata** and Toshiya Nakaguchi, “**Laparoscopic Image Region Segmentation Based on Texture Analysis by Regions**,” *Proc. of The Tenth International Workshop on Image Media Quality and its Applications (IMQA2020)*, PS2-4, 6 pages, National Taiwan Univ. of Science and Technology, March 12-13, 2020.

[23]. **Norifumi Kawabata** and Toshiya Nakaguchi, “**Color Laparoscopic Image Diagnosis for Automatic Detection of Coded Defect Region**,” *Proc. of The 5th Asia Color Association Conference (ACA2019 Nagoya)*, Vol. 5, P1-25, pp. 487–492, Meijo Univ., Nagoya, Japan, November 29–December 2, 2019.

[24]. **Norifumi Kawabata**, “**Computational Classification of Texture Contents in the Shitsukan Research Database**,” *Proc. of The 26th International Display Workshops (IDW’19), Workshop on Applied Vision and Human Factors (Ergonomics for Display Applications II)*, Vol. 26, VHF7-3, pp. 1185–1188, Sapporo Convention Center, Sapporo, Japan, November 27-29, 2019.

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12.3 Technical Reports

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12.4 Invited Talks

[37]. **Norifumi Kawabata**, “**A Study on 3D CG Image Quality Assessment Based on Visible Digital Watermarking for Advanced Information Security**,” *2025 8th International Conference on Blockchain Technology and Applications (ICBTA2025), Data Privacy and Information Security Protection Mechanisms*, The Kanazawa Theatre, Kanazawa, Ishikawa, Japan, December 2025 (Invited).

12.5 Dissertation

[38]. **Norifumi Kawabata**,
“**A Study of the Multi-view 3D CG Image Quality Assessment Including the Image Characteristics**,” Doctor Dissertation, Department of Information Engineering, Graduate School of Information Science, Nagoya University, January 2017.