

Curriculum Vitae

Dr. Norifumi KAWABATA

Research Collaborator
Emerging Media Initiative, Kanazawa University

September 6, 2026

1 Affiliation

Research Collaborator, Emerging Media Initiative, Kanazawa University, Kanazawa-shi, 920-1192 Japan
Principal Investigator, Computational Imaging Lab, Kanazawa, Japan
mailto: norifumi [AT] staff [DOT] kanazawa-u [DOT] ac [DOT] jp
Personal Webpage: <https://en.norifumik.nagoya>
Workspace Webpage: <https://www.emi.kanazawa-u.ac.jp>

2 Academic & Professional Experience

- April 2026 – present
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 2026 – present
Research Collaborator, Emerging Media Initiative, **Kanazawa University**
- April 2025 – March 2026
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 2026 – present
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 2026 – present
Research Collaborator,
Emerging Media Initiative, Kanazawa University
A Study on the Construction of a Digital Archive of Historical Materials and Secure Utilization Technologies to Support Museum Digital Transformation.
- April 2025 – March 2026
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
- CG-ARTS Certification Image Processing Engineer 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 (IEEEJ)
(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)

- The Institute of Electrical Engineers of Japan
(Member, from September 2025)
- The Color Science Association of Japan
(Member, from February 2026)

10.2 Committee Experience

- Panel of judges, *R.8 IEICE Hokuriku Section Excellent Student Paper Award* (September 2026 – present)
- Session Chair, *Joint Conference of Hokuriku Chapters of Electrical and Information Societies 2026 (JHES2026)*
(September 2026 – present)
- Technical Program Committee Member, *The 33rd International Conference on MultiMedia Modeling (MMM 2027)* (July 2026 – present)
- Publicity Chair, *2026 9th International Conference on Blockchain Technology and Applications (ICBTA2026)*
(July 2026 – present)
- Technical Committee, *2026 9th International Conference on Blockchain Technology and Applications (ICBTA2026)*
(July 2026 – present)
- 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, *Expert Systems With Applications*
(from August 2026, by once)
- Reviewer, *2026 IEEE International Conference on Visual Communications and Image Processing (VCIP2026)*
(from July 2026, by three times)

- Reviewer, *APSIPA Annual Summit and Conference 2026 (APSIPA ASC 2026)*
(from July 2026, by five times)
- Reviewer, *Digital Signal Processing (DSP)*
(from June 2026, by once)
- Reviewer, *The 34th Color and Imaging Conference (CIC34)*
(from May 2026, by four times)
- Reviewer, *IEEE Open Journal of Signal Processing*
(from March 2026, by once)
- Reviewer, *IEEE Transactions on Signal Processing (SP)*
(from January 2026, by once)
- Reviewer, *International Journal of Computer Assisted Radiology and Surgery (IJCARS)*
(from January 2026, by once)
- 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 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]. **“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 2025,
February 10, 2026.
- [2]. **“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.
- [3]. **“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.
- [4]. **“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.
- [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 2024,
January 7, 2025.
- [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 2023,
January 4, 2024.
- [7]. **“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.
- [8]. **“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.
- [9]. **“Certificate of Appreciation for serving as a reviewer for Journal of Electronic Imaging during the calendar year of 2017,”**
February 17, 2018.

- [10]. **“Forum on Information Technology (FIT2016) FIT Encouragement Award 2016,”**
Gofuku Campus, Univ. of Toyama (Presentation, Sept. 7, 2016),
September 9, 2016.
- [11]. **“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,”** *IEEEJ 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**, **“Simulation and Analysis of Point Cloud Data for Autonomous Driving Localization,”** *Proc. of The 33rd International Display Workshops (IDW’26)*, December 2026 (Accepted).
- [6]. **Norifumi Kawabata**, **“Quantitative Evaluation of Spatial and Color Reproduction in 3D Gaussian Splatting Using S-CIELAB Color Space,”** *Proc. of The 9th Asia Color Association Conference (ACA2026 Taipei)*, November 2026 (Accepted).
- [7]. **Norifumi Kawabata**, **“An Improved Biological Signal Processing and Data Cleaning Approach for EEG Database Analysis,”** *Proc. of 2026 IEEE 15th Global Conference on Consumer Electronics (GCCE 2026)*, October 2026 (Accepted).
- [8]. **Norifumi Kawabata**, **“Evaluating Total Variation Regularization for Denoising in Color Laparoscopic Imaging,”** *Computational Color Imaging Workshop Satellite workshop (CCIW2026) within (ICIP2026), IEEE International Conference on Image Processing*, 6 pages, Tampere Hall, Tampere, Finland, September 2026 (Accepted).

- [9]. **Norifumi Kawabata**, “A Study on Wavelet Multi-Resolution Analysis of Laparoscopic Image around Contrast Enhancement,” *Proc. of The 41st International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC2026)*, Comp.1-4, 6 pages, Royal Orchid Sheraton Riverside Hotel Bangkok, Bangkok, Thailand, July 2026.
- [10]. **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-259, 6 pages, Hyatt Regency San Francisco Airport, Burlingame, CA USA, March 2026.
- [11]. **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, February 2026.
- [12]. **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.
- [13]. **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.
- [14]. **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.
- [15]. **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.
- [16]. **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.
- [17]. **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.
- [18]. **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).

- [19]. **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.
- [20]. **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.
- [21]. **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.
- [22]. **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.
- [23]. **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.
- [24]. **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.
- [25]. **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.
- [26]. **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.
- [27]. **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.
- [28]. **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.
- [29]. **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.

- [30]. **Norifumi Kawabata**, “HEVC Image Quality Assessment of the Multi-view and Super-resolution Images Based on CNN,” *Proc. of 2018 IEEE 7th Global Conference on Consumer Electronics (GCCE 2018)*, POS1A-3, pp. 38–39, Nara Royal Hotel, Nara, Japan, October 9-12, 2018.
 - [31]. **Norifumi Kawabata**, “Image Diagnosis for Coded Defect Detection on Multi-view 3D Images,” *Proc. of The Ninth International Workshop on Image Media Quality and its Applications (IMQA2018)*, PS-10, pp. 110–119, Kobe Univ., Kobe, Japan, September 27-28, 2018.
 - [32]. **Norifumi Kawabata**, “Multi-view 3D CG Image Quality Evaluation and Analysis for Application Procedure between H.265/HEVC and Watermarking,” *Proc. of The 21st International Workshop on Advanced Image Technology (IWAIT2018)*, D3-3, 4 pages, The Imperial Mae Ping Hotel, Chiang Mai, Thailand, January 7-9, 2018 (Traveling Abroad Travel Expenses Assistance in the Telecommunications Advancement Foundation).
 - [33]. **Norifumi Kawabata**, “Image Quality Assessment for Multi-view 3D CG Images and 5K High Definition Images Based on S-CIELAB Color Space,” *Proc. of The 24th International Display Workshops (IDW’17), Workshop on 3D/Hyper-Realistic Displays and Systems (Autostereoscopic Display)*, Vol. 24, 3D5-1, pp. 849–852, Sendai International Center, Sendai, Japan, December 6-8, 2017.
 - [34]. **Norifumi Kawabata** and Masaru Miyao, “Multi-view 3D CG Image Quality Assessment for Contrast Enhancement Including S-CIELAB Color Space in case the Background Region is Gray Scale,” *Proc. of The 31st International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC2016)*, T2-6-3, pp. 579–582, Municipal Center (Jichikaikan), Okinawa, Japan, July 10-13, 2016 (ITE (The Institute of Image Information and Television Engineers) International Conference Support Grant).
 - [35]. **Norifumi Kawabata** and Masaru Miyao, “Multi-view 3D CG Image Quality Evaluation Including Visible Digital Watermarking Based on Color Information,” *Proc. of The Eighth International Workshop on Image Media Quality and its Applications (IMQA2016)*, OS1-3, pp. 18–26, Noyori Conference Hall, Higashiyama Campus, Nagoya Univ., Nagoya, Japan, March 10-11, 2016.
 - [36]. **Norifumi Kawabata** and Masaru Miyao, “3D CG Image Quality Assessment for the Luminance Change by Contrast Enhancement Including S-CIELAB Color Space with 8 Viewpoints Parallax Barrier Method,” *Proc. of The 1st International Conference on Advanced Imaging (1st ICAI2015)*, T107-01, pp. 632–635, National Center of Science (Hitotsubashi Memorial Hall), Tokyo, Japan, June 17-19, 2015.
 - [37]. **Norifumi Kawabata**, Masaru Miyao, and Yuukou Horita, “3D CG Image Quality Metrics Including the Coded Degradation by Regions with 8 Viewpoints Parallax Barrier Method,” *Proc. of The Seventh International Workshop on Image Media Quality and its Applications (IMQA2014)*, PS-9, pp. 102–105, Keyaki Hall, Nishi Chiba Campus, Chiba Univ., Chiba, Japan, September 2-3, 2014.
 - [38]. **Norifumi Kawabata** and Yuukou Horita, “Statistical Analysis and Consideration of Subjective Evaluation of 3D CG Images with 8 Viewpoints Lenticular Lens Method,” *Proc. of The Sixth International Workshop on Image Media Quality and its Applications (IMQA2013)*, T1-2, pp. 23–32, Takanawa Campus, Tokai Univ., Tokyo, Japan, September 12-13, 2013.
 - [39]. **Norifumi Kawabata**, Keiji Shibata, Yasuhiro Inazumi, and Yuukou Horita, “Image Quality Evaluation of 3D CG Images with 8 Viewpoints Lenticular Lens Method,” *Proc. of The Fifth International Workshop on Image Media Quality and its Applications (IMQA2011)*, D-10, pp. 88–90, Campus Plaza Kyoto, Kyoto, Japan, October 4-5, 2011.
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12.3 Technical Reports

- [40]. Norifumi Kawabata and Masaru Miyao, “**Multi-view 3D CG Image Quality Assessment by Using S-CIELAB Color Space Including Visible Digital Watermarking by Regions in case the Background Region is Gray Scale,**” *IEICE Tech. Rep., Image Media Quality*, vol.116, no.68, IMQ2016-1, pp.1–6, Nishi-Chiba Campus, Chiba Univ., May 2016.
- [41]. Norifumi Kawabata and Masaru Miyao, “**3D CG Image Quality Metrics for the Contrast Enhancement of the Object Region Including S-CIELAB Color Space with 8 Viewpoints Parallax Barrier Method,**” *IEICE Tech. Rep., Image Media Quality*, vol.115, no.48, IMQ2015-4, pp.17–22, Gofuku Campus, Univ. of Toyama, May 2015.

12.4 Invited Talks

- [42]. 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

- [43]. 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.