

# International Workshop on Intelligent Image Processing

August 11-12, 2023

Ritsumeikan University, Shiga, Japan

<https://media.ritsumeai.ac.jp/iip/iwiip23-index.html>

**General Chair**

Yen-Wei Chen (Professor, Ritsumeikan University, Japan)

**Co-Program Chairs**

Jian Cheng (Professor, Chinese Academy of Sciences, China)

Layth Sliman (Professor, EFREI, France)

Xiangyan Zeng (Professor, Fort Valley State University, USA)

# International Workshop on Intelligent Image Processing

Aug.11-12, 2023

Epoch Hall, BKC, Ritsumeikan University, Shiga, Japan

<https://media.ritsumei.ac.jp/iip/iwiiip23-index.html>

## Program and event summary

Aug. 11, 2023

9:00-9:30	<b>Registration</b>
9:30-9:40	<p><b>Opening Remark</b></p> <p><i>Yen-Wei Chen</i> <i>General Chair, Professor of Ritsumeikan University, Japan</i></p> <p>Remark</p> <p><i>Shinichi Tamura</i> <i>Emeritus Professor, Osaka University, Japan</i></p>
9:40-10:20	<p><b>Invited Talk 1</b></p> <p>Chair: <i>Yen-Wei Chen (Ritsumeikan University, Japan)</i></p> <ul style="list-style-type: none"> <li>Efficient Intelligent Computing on Edge Devices <i>Jian Cheng</i> <i>Professor, Chinese Academy of Science, China</i></li> </ul>
10:20-10:56	<p><b>Session 1</b></p> <p>Chair: <i>Xianhua Han (Associate Professor, Yamaguchi University, Japan)</i></p> <ul style="list-style-type: none"> <li>Interference Tolerant Sub-GHz Band Wireless Sensor Networks <i>Shusuke Narieda</i> <i>Associate Professor, Mie University, Japan</i></li> <li>A Privacy-Preserving and Generalization Model for Medical Imaging <i>Titinunt Kitrungrotsakul</i> <i>Associate Researcher, Zhejiang Lab, China</i></li> </ul>

10:56-11:10	<b>Coffee Break</b>
11:00-12:30	<b>Poster Session</b> Students (14 poster presentations)
12:30-13:30	<b>Lunch at Nadeshiko Restaurant</b>
13:30-14:10	<b>Invited Talk 2</b> Chair: <i>Yen-Wei Chen (Ritsumeikan University, Japan)</i>  <ul style="list-style-type: none"> <li>● The Future of Special Video Applications <i>Katsuhisa Ogawa</i> <i>Visiting Professor, Osaka University of Arts, Japan</i></li> </ul>
14:10-15:40	<b>Session 2</b> Chair: <i>Yutaro Iwamoto (Lecturer, Osaka Electro-Communication University, Japan)</i>  <ul style="list-style-type: none"> <li>● Hyperspectral Image Super Resolution and Reconstruction <i>Xian-Hua Han</i> <i>Associate Professor, Yamaguchi University, Japan</i></li> <li>● Accurate Segmentation of Medical Images via Deep Networks <i>Rui Xu</i> <i>Associate Professor, Dalian University of Technology, China</i></li> <li>● Visual Perception for Intelligent Manufacturing <i>Guifang Duan</i> <i>Associate Professor, Zhejiang University, China</i></li> <li>● Generating Quadrat Images for Identifying Sea Bottom Matrices using GAN <i>Shinya Nozaki</i> <i>Associate Professor, University of the Ryukyus, Japan</i></li> <li>● Federated Active Learning for Multicenter Collaborative Disease Diagnosis <i>Xing Wu</i> <i>Professor, Shanghai University, China</i></li> </ul>
15:40-15:50	<b>Coffee Break</b>

15:50-17:40	<p><b>Session 3</b> Chair: <i>Rui Xu (Dalian University of Technology China)</i></p> <ul style="list-style-type: none"> <li>● Medical Image Analysis and Its Clinical Application Based on Data Science <i>Tomoko Tateyama</i> <i>Associate Professor, Fujita Health University, Japan</i></li> <li>● Digital Twin and 3D Scene Virtual Tour Explorer Using Artificial Intelligence <i>Truc-Hung Ngo</i> <i>Principal Scientist, Vizzio Technologies PTE. LTD, Singapore</i></li> <li>● Endoscopic Navigation System for Minimally Invasive Skull Base Surgery <i>Danni Ai</i> <i>Associate Professor, Beijing Institute of Technology, China)</i></li> <li>● Research on Intelligent Diagnosis Model of Gastrointestinal Diseases <i>Xu Qiao</i> <i>Associate Professor, Shandong University, China</i></li> <li>● Disentanglement of Latent Space and Improved Domain Transformation <i>Masataka Seo</i> <i>Associate Professor, Osaka Institute of Technology, Japan</i></li> <li>● The Development of Infant Brain Ventricle Segmentation System Using Deep Learning <i>Yutaro Iwamoto</i> <i>Lecturer, Osaka Electro-Communication University, Japan</i></li> </ul>
17:40-17:45	<p><b>Closing Remark</b> <i>Layth Sliman (Professor, EFREI, France)</i></p>

Aug. 12, 2023 **Free Discussion**



**Poster Presentation (Aug. 11, 2023 11:00-12:30)**

P1	Noise Search Method for Improving Control Performance of Image Transformation in Diffusion Model <i>Toshiki HAZAMA (Ritsumeikan University, Japan)</i>
P2	Weakly-Supervised and Unsupervised Liver Lesion Detection <i>He LI (Ritsumeikan University, Japan)</i>
P3	Efficient Multi-phase CT Image Segmentation Using Unsupervised Domain Adaptation <i>Swathi ANANDA (Ritsumeikan University, Japan)</i>
P4	OA-GAN: Organ-Aware Generative Adversarial Network for Synthesizing Contrast-enhanced Medical Images <i>Yulin YANG (Ritsumeikan University, Japan)</i>
P5	Accurate Cephalometric Landmark Detection Based on Knowledge Distillation <i>Yu SONG (Ritsumeikan University, Japan)</i>
P6	Semi-Supervised Learning for Postoperative Early Recurrence Prediction of Hepatocellular Carcinoma Using Histopathological Image <i>Gan ZHAN (Ritsumeikan University, Japan)</i>
P7	Segmentation of Infant Brain Ventricles with Hydrocephalus in MRI <i>Hikari MAEDA (Ritsumeikan University, Japan)</i>
P8	A Module Selection-Based Approach for Efficient Skeleton Human Action Recognition <i>Shurong CHAI (Ritsumeikan University, Japan)</i>
P9	Multimodal Representation Learning with Homogeneous and Diverse Constraints Using Multi-emotional Audiovisual Features for Depression Detection <i>Shiyu TENG (Ritsumeikan University, Japan)</i>
P10	A Genotype-Guided Radiomics Signature Framework for Recurrence Prediction of Non-Small Cell Lung Cancer <i>Yang AI (Ritsumeikan University, Japan)</i>
P11	Fine-tuned SAM for Glioma Segmentation on Multimodal Brain MR Images <i>Xiaoyu SHI (Ritsumeikan University, Japan)</i>
P12	Modality-Invariant Representation Learning for Accurate Hand Gesture Recognition Using Color and Depth Images <i>Masaya OKANO (Ritsumeikan University, Japan)</i>
P13	Automatic AI-Based Segmentation and Holographic Interactive Visualization of Pulmonary Airways <i>Liang LYU (Ritsumeikan University, Japan)</i>
P14	Semi-supervised Medical Image Classification based on Contrastive Learning <i>Jihong HU (Ritsumeikan University, Japan)</i>