2024 IEEE International Conference on Imaging Systems and Techniques (IST 2024)

Tokyo, Japan
14-16 October 2024

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Monday, October 14, 2024

8:05 AM - 8:45 AM
Registration
Room: Ballroom A

9:00 AM - 9:15 AM
Welcome Message from the General Chair
Dr. George Giakos, Fellow of the IEEE, Manhattan University, New York, USA
Room: Ballroom A

9:15 AM - 9:30 AM
Welcome Message from the Local Organizer
Dr. Jiang Liu, Waseda University, Tokyo, Japan
Room: Ballroom A

9:30 AM - 11:00 AM
International School of Imaging Lectures
Room: Ballroom A

9:30   **Lecture 1: "Electrical Impedance Tomography for Medical Applications"**
Professor Masa Takei (Chiba University, Japan)

10:15   **Lecture 2: "Quantum Intelligence and Neuromorphic Computing"**
Professor George K. Giakos (Manhattan University, USA)

11:00 AM - 11:30 AM
Coffee Break

11:30 AM - 12:30 PM
Advanced Detection and Imaging Techniques
Session Chair: George K. Giakos, Manhattan University, USA
Room: Ballroom A

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11: 45   **Reconfigurable Enhanced Spike-Event Neuromorphic Detection of Quasi-DC Signals in Noisy Environments...6**
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Jack Griffin (Manhattan University, USA)
Gabriel Gojcaj (Manhattan University, USA)
Nicolas Douard (Manhattan University and Virtue Foundation, USA)
Sofia Bernabei ((Manhattan University, USA)
Zachary Meryn (Bronx School of Science, USA)
Christian Prashad (Manhattan University, USA)
Nicholas Neto (Manhattan University, USA)
Kyle Burdick (Manhattan University, USA)
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Hairong Zheng (SIAT Shenzhen, China)
Dong Liang (Shenzhen Institute of Advanced Technology, China)
Haifeng Wang (Shenzhen Institutes of Advanced Technology, China)

12:15 A Smart Healthcare Framework for Accurate Detection of Schizophrenia using Multi-Channel EEG...N/A

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Amit Joshi (Malviya National Institute of Technology, India)
Deepshikha Yadav (MSIT, India)
Saraju P Mohanty (University of North Texas, USA)

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Vandan Parmar (DataRobot, USA)
Daniel Straulino (DataRobot, USA)
Matthew Harris (DataRobot, University of Pennsylvania Weitzman School of Design, USA)
Chandler McCann (DataRobot, USA)
Allen Nasseri (Virtue Foundation, USA)
Corey Hanson (Virtue Foundation, USA)

Mohammed Bataglia (Virtue Foundation, USA)
Evan E Afshin (Virtue Foundation, Weill Cornell Medicine, USA)
Mattia Filiaci (Virtue Foundation, USA)
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George K Giakos (Manhattan College, USA)
Ebby Elahi (Virtue Foundation, Icahn School of Medicine at Mount Sinai, USA)

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Lead A Canada (Polytechnic University of the Philippines, Philippines)

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Session Chair: Michail Kosmidis, Democritus University of Thrace, Greece
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Georgios Petroudis (University of the Aegean, Greece)
Nikos Papastamatiou (Senseworks, Greece)
Charis Mesaritakis (University of the Aegean, Greece)
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Ardyono Priyadi (ITS, Indonesia)
Tri Sardjono (Institut Teknologi Sepuluh Nopember, Indonesia)
Eko Mulyanto Yuniarno (Institut Teknologi Sepuluh Nopember, Indonesia)
Mauridhi Hery Purnomo (Institut of Technology Sepuluh Nopember, Indonesia)

7:00 PM - 10:00 PM
Reception Dinner
Sunshine Cruise Cruise
Address: 〒170-6058 Tokyo, Toshima City, Higashiikebukuro, 3 Chome–1 サンシャイン60 58F

Tuesday, October 15, 2024

8:05 AM – 9:30 AM
Registration
Room: Ballroom A

9:45 AM - 10:45 AM
International School of Imaging Lectures
Room: Ballroom A

9:45   **Lecture 3: "Immersive communication technologies for Digital Twin in Beyond 5G/6G era"**
Dr. Satoshi Konishi (KDDI Corporation, Japan)

11:00 AM - 11:30 AM
Coffee Break

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Session Chair: Dimosthenis Angelis, Technical University of Denmark, Denmark
Room: Ballroom A

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Chao Sun (Beijing Institute of Technology, China)
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Rencheng Song (Hefei University of Technology, China)
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Shin Yoshizawa (RIKEN, Japan)
Takashi Michikawa (RIKEN, Japan)
Shigeho Noda (Advanced Center for Computing and Communication, RIKEN, Japan)
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Dimitrios Alexiou (Centre for Research and Technology Hellas, Greece)

Ioannis Kostavelis (Centre for Research and Technology Hellas, Greece)

Dimitrios Giakoumis (CERTH-ITI, Greece)

Dimitrios Tzovaras (Centre for Research and Technology Hellas, Greece)

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Session Chair: Xiaoyan Wang, The University of Manchester, United Kingdom, Great Britain
Room: Ballroom B

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Jing Zhong (Beihang University, China)

12:30 PM - 2:00 PM
Lunch

2:00 PM - 3:00 PM
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Room: Ballroom A

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  Feby Artwodini Muqtadiroh (Institut Teknologi Sepuluh Nopember, Indonesia)
  Ardyono Priyadi (ITS, Indonesia)
  Mauridhi Hery Purnomo (Institut of Technology Sepuluh Nopember, Indonesia)

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Session Chair: Xinyao Han, Tsinghua University, China
Room: Ballroom B

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Session Chair: Luyun Li, Nanyang Technological University, Singapore
Room: Ballroom A

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Yihang Zhou (Shenzhen Institutes of Advanced Technology, China)
Yanjie Zhu (Shenzhen Institutes of Advanced Technology, China)
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Jo-Ann Magsumbol (Polytechnic University of the Philippines, Philippines)

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Gala Dinner
CÉ LA VI TOKYO
Address: 〒150-0043 Tokyo, Shibuya City, Dogenzaka, 1 Chome−2−3 17階 東急プラザ渋谷

Wednesday, October 16, 2024

9:00 AM – 10:15 AM
AI Driven Imaging Applications
Session Chair: Jiang Liu, Waseda University, Japan
Room: Ballroom A

9:00 **Positive and Unlabelled Learning with Data Approximation for Photovoltaic Defect Detection...345**
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George Pavlidis (Athena Research Center, Greece)
Spyridon G. Mouroutsos (Democritus University of Thrace, Greece)
Theoklitos Karakatsanis (Democritus University of Thrace, Greece)
Antonios Gasteratos (Democritus University of Thrace, Greece)

9:15 **SiliAI: AI-Driven Robotic System for Efficient Chili Pepper Sorting Using YOLOv8...351**
Hannah Rea Abarquez (Polytechnic University of the Philippines, Philippines)
Angelo Miguel Nobleza Agsolid (Polytechnic University of the Philippines - Manila, Philippines)
James Amoguis Oliveros (Polytechnic University of the Philippines- Sta. Mesa, Philippines)
Alexandra Ysabel F Sebastian (Polytechnic University of the Philippines Manila, Philippines)
Sean Lenard L. Transfiguracion (Polytechnic University of the Philippines - Manila, Philippines)
Jo-Ann Magsumbol (Polytechnic University of the Philippines, Philippines)
Marife A. Rosales (Polytechnic University of the Philippines, Philippines)

9:30 **Automated Drink Dispenser Utilizing Festo Lab-Volt 5150 Robotic Arm: Implementation and Performance Analysis...357**
Hana Jane Tiamson (Polytechnic University of the Philippines, Philippines)
Allan M Balanga (Polytechnic University of the Philippines, Philippines)
Marcia Loren A. Cabria (Polytechnic University of the Philippines, Philippines)
Charles Benedict Diego (Polytechnic University of the Philippines, Philippines)
Ma Thereza R. Zamora (Polytechnic University of the Philippines & IECEP Manila, Philippines)
Marife A. Rosales (Polytechnic University of the Philippines, Philippines)

9:45 **Design and Development of a 6 DOF Arbiter Robotic Arm for Games of the General (Salpakan) using Yolov8...363**
Jerick Altamerano (Polytechnic University of the Philippines, Philippines)
Trisha Mae Morado (Polytechnic University of the Philippines, Afghanistan)
Julius Nicholai T Navatilan (Philippines)
Martin Andrei U. Santos (Polytechnic University of the Philippines - Manila, Philippines)
Marife A. Rosales (Polytechnic University of the Philippines, Philippines)

10:00 **VGG16, RESNET50V2, and INCEPTIONV3 Deep Learning Architecture For Tomato Leaf Disease Classification: A Comparative Study...N/A**
Yzrael Austria (Polytechnic University of the Philippines, Philippines)
Jessica Chriselle S Basa, Marife A. Rosales (Polytechnic University of the Philippines, Philippines)
Jo-Ann Magsumbol (Polytechnic University of the Philippines, Philippines)

11:00 AM
Closing Ceremony
Room: Ballroom A