

## **QCAV2021 Program**

Day 1 : Wednesday 12th MAY	
8:00-8:20(CEST) 15:00-15:20(JST)	QCAV2021 Opening Session
8:20-9:20(CEST) 15:20-16:20(JST)	Plenary Talk 1  PT-1 Photometric 3D-reconstruction Dr. Yvain Quéau (The French National Centre for Scientific Research (CNRS), France) Chair : Prof. Olivier Aubreton(Université de Bourgogne, France)
9:30-11:30(CEST) 16:30-18:30(JST)	General Talk Session 1  GT1-1 -- GT1-19

Day 2 : Thursday 13th MAY	
8:00-9:00(CEST) 15:00-16:00(JST)	Plenary Talk 2  PT-2 Learning Neural Character Controllers from Videos and Motion Capture Data Prof. Taku Komura (University of Hong Kong, Hong Kong ) Chair: Prof. Nobuyuki Umezu(Ibaraki University, Japan)
9:00-11:00(CEST) 16:00-18:00(JST)	General Talk Session 2  GT2-1 -- GT2-16

Day 3 : Friday 14th MAY	
8:00-9:00(CEST) 15:00-16:00(JST)	Plenary Talk 3  PT-3 Applications of Multispectral Filter Array Imaging Prof. Ludovic Macaire (Université de Lille, France) Chair: Dr. Yann Gavet(Ecole Nationale Supérieure des Mines de Saint-Etienne, France)
9:00-11:00(CEST) 16:00-18:00(JST)	General Talk Session 3  GT3-1 -- GT3-18
11:30-11:50(CEST) 18:30-18:50(JST)	QCAV2021 Award & Closing Session

GT1-1	Mikel Etxeberria-Garcia, Mikel Labayen, Fernando Eizaguirre, Maider Zamalloa and Nestor Arana-Arexolaleiba: Monocular Visual Odometry for underground railway scenarios
GT1-2	Pierre Gutierrez, Maria Luschkova, Antoine Cordier, Mustafa Shukor, Mona Schappert and Tim Dahmen: Synthetic training data generation for deep learning based quality inspection
GT1-3	Hiroyuki Ukida, Yoshitaka Hatakenaka, Masahide Tominaga, Tomoyo Sasao, Kenji Terada and Atsuya Yoshida: Inner and Outer 3D Shape Reconstruction of Puppet Head from CT images
GT1-4	Canceled
GT1-5	M. Al Assaad, S. Bazeille, T. Laurain, A. Dieterlen and C. Cudel : Interest of Pseudo-Focused Images for Key-Points Detection in Plenoptic Imaging
GT1-6	Ryota Nishio, Masaki Oono, Takaharu Goto, Takahiro Kishimoto and Masami Shishibori : A reconstruction method of 3D face model from front and side 2D face images using deep learning model
GT1-7	Assya Bougrara, Igor Jovančević, Hamdi Ben Abdallah, Benoît Dolives, Mathieu Belloc and Jean-José Orteu: Inspection of mechanical assemblies based on 3D Deep Learning approaches
GT1-8	A. Meguenanni, K. Tout, S. Kohler, S. Bazeille, J-P. Chambard and C. Cudel : Deflectometry based on Light-Field Imaging
GT1-9	Manuel Kaufmann, Vivien Volland, Yifei Chen, Ira Effenberger and Christoph Veyhl : Scan Quality Estimation for Industrial Computed Tomography Using Convolutional Neural Networks
GT1-10	Itta Endo, Shinichiro Morita, Kazuho Kito, Harumi Kobayashi, Naoki Mukawa and Akio Nakamura: Aperture localization based on vibro-stimuli generated from distance variation
GT1-11	Takuma Ueshima, Katsuya Hotta, Shogo Tokai and Chao Zhang : Training PointNet for Human Point Cloud Segmentation with 3D Meshes
GT1-12	H.Kadota, S.Fujisawa, M.Oono, R.Morigaki, N.Yamamoto, Y.Kanematsu, M.Ishihara and M.Shishibori: Development of a 3D visualization system for the cerebral aneurysm coil embolization
GT1-13	Lisa Poirier-Herbeck, Olivier Aubreton and David Fof: 3D Reconstruction of mirror-like surfaces by smart deflectometry
GT1-14	Abir Zendagui, Gaëtan Le Goïc, Hermine Chatoux, Jean-Baptiste Thomas, Yuly Castroa, Marvin Nurit and Alamin Mansouri : Quality assessment of dynamic virtual relighting from RTI data: application to the inspection of engineered surfaces
GT1-15	Tomoaki Fukuda, Yonghoon Ji and Kazunori Umeda: Tiny range image sensors using multiple laser lights for short distance measurement
GT1-16	Nurit Marvin, Le Goïc Gaëtan, Maniglier S., Jochum P., Chatoux H. and Mansouri A.: Improved visual saliency estimation on manufactured surfaces using High-dynamic Reectance Transformation Imaging
GT1-17	Dingyu Liu, Yusheng Wang, Yonghoon Ji, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: Development of Image Simulator for Forward-looking Sonar Using 3D Rendering
GT1-18	Makoto Nonoda, Kenji Terabayashi, Ryota Asano and Tohru Sasaki: Adaptive detection of retroreflective markers for acquisition of range image dataset using a time-of-flight camera
GT1-19	Mikihiro Ikura, Sarthak Pathak, Atsushi Yamashita and Hajime Asama: Polynomial-fitting Based Calibration for an Active 3D Sensing System Using Dynamic Light Section Method

GT2-1	Eisuke Yamamoto, Momoyo Ito, Shin-ichi Ito and Minoru Fukumi: Separation of Compound Actions with Wrist and Finger Based on EMG
GT2-2	Eloi Dussy Lachaud, Andrew Caunes, Gilles Thuret and Yann Gavet: Digital twins of human corneal endothelium from generative adversarial networks.
GT2-3	Min Zou and Takuya Akashi: Latent Space Visualization of Half Face and Full Face by Generative Model
GT2-4	Yuya Hashiguchi, Kenji Terada, Kenji Shinozaki and Kazuhiro Miyama: Identification of Insect Infiltration Time by Tissue Slice
GT2-5	Tomoya Kaji, Kenji Terada and Stephen Karungaru: Piano performance support system with a head-mounted display
GT2-6	Saki Asahina and Nobuyuki Umezu: Recipe Recommendation and Cooking Instruction based on Food Material Recognition
GT2-7	Shinichiro Morita , Itta Endo, Harumi Kobayashi, Naoki Mukawa and Akio Nakamura: Environment understanding during walking via modality conversion from visual to haptic information - Evaluate impression of the vibro-stimuli simulating optical flow -
GT2-8	Sota Akiyama and Nobuyuki Umezu: Supporting Sports Instruction with Comparative Display of Forms
GT2-9	Tadashi Ohara and Nobuyuki Umezu: Webcam-based Categorization of Task Engagement of PC Users at Work
GT2-10	Nandin-Edene E., Karungaru S. and Terada K.: Social Distance Measurement for Indoor Environments
GT2-11	Ryousuke Tsubaki, Takumi Toyoda, Kota Yoshida and Akio Nakamura: Vision-Based Classification of Mosquito Species: Data Augmentation by Background Replacement for Convolutional Neural Network-based Species Classification of Smashed Mosquitoes
GT2-12	H. Aoki, T. Shiga, A. Suzuki and K. Takeuchi: Proposal for 3D visualization of cardiac mechanical activity by hybrid stereo measurement
GT2-13	Gakuto Maruyama , Naoshi Kaneko, Seiya Ito and Kazuhiko Sumi: Reducing Depth Ambiguity in 3D Human Pose and Body Shape Estimation
GT2-14	Hiroki Kojima, Naoshi Kaneko, Seiya Ito and Kazuhiko Sumi: You Don't Drink a Cupboard: Improving Egocentric Action Recognition with Co-occurrence of Verbs and Nouns
GT2-15	Takafumi Nagi, Naoshi Kaneko, Seiya Ito and Kazuhiko Sumi: Automatic Dataset Collection for Speech-Driven Gesture Generation
GT2-16	Shunsuke Kogure and Yoshimitsu Aoki: Multi-modal Action Segmentation in the Kitchen with a Feature Fusion Approach

GT3-1	Robert Nsinga, Stephen Karungaru and Kenji Terada: A Comparative Study of BatchEnsemble for Multi-Object Tracking Approximations in Embedded Vision
GT3-2	Hideyuki Mimura , Shin-ichi Ito, Momoyo Ito and Minoru Fukumi: Personal Authentication and Recognition of Aerial Input Hiragana Using Deep Neural Network
GT3-3	Canceled
GT3-4	Antoine Léger, Gaëtan Le Goic, Eric Fauvet, David Fofi and Rémi Kornalewski: R-CNN based automated visual inspection system for engine parts quality assessment
GT3-5	Antoine Cordier, Deepan Das and Pierre Gutierrez: Active learning using weakly supervised signals for quality inspection
GT3-6	Amziane A., Losson O., Mathon B., Macaire L. and Dumenil A.: Weed detection by analyzis of multispectral images acquired under uncontrolled illumination conditions
GT3-7	J. Deng, T. Minematsu, A. Shimada and R. Taniguchi: Identify solar panel defects by using differences between solar panels
GT3-8	Alizée Bouchot , Amandine Ferrieux-Paquet, Sylvie Descartes, Guilhem Mollon and Johan Debayle: Towards a quantitative characterization of wear particles using image analysis and machine learning
GT3-9	Toshiki Katayama, Hiroumi Kawada, Masashi Nishiyama and Yoshio Iwai: Estimation of beef marbling standard for live cattle using multi-input convolutional neural network with ultrasound images
GT3-10	Abdelrahman G. Abubakr, Igor Jovančević, Nour Islam Mokhtari, Hamdi Ben Abdallah and Jean-José Orteu: On learning deep domain-invariant features from 2D synthetic images for industrial visual inspection
GT3-11	Yusuke Misaki and Kenji Terada: Automatic recognition of parasitic bee species using wing vein shape
GT3-12	Orgil J., Karungaru S. and Terada K. : Continual learning: Linear layer classifier concatenation using image processing transform functions
GT3-13	T. Shimizu, Y. Haramiishi, Y. A. Rahim, Syamir Alihan, Y. Kobayashi, A. Matsui, S. Kotani, H. Watanabe: Evaluation of shot peening machined surface by image processing
GT3-14	Mohammad Mehedi Hassan, Karungaru Stephen and Kenji Terada: An Intelligent Traffic Control Systems using On-road Cameras
GT3-15	Tatsuya Oyabu, Rebeka Sultana and Gosuke Ohashi: Pre-training dataset generation for classifying beams of vehicle headlights from nighttime camera image
GT3-16	Yutaka Kawashima, Mayuka Higo, Toshiyuki Tokiwa, Yukihiro Asami, Kenichi Nonaka and Yoshimitsu Aoki: Out-of-Distribution Detection for Fungi Images with Similar Features
GT3-17	Y. Kondo, Y. Yamaguchi, H. Saito, I. Yoshida, M. Numada and H. Koshimizu: Verification of denoising performance of edge-preserving noise reduction filter using fast M-estimation method
GT3-18	Hiroki Kanazawa, Yuta Nakamoto, Jiaxin Zhou and Takashi Komuro: Human detection from low-resolution video images using 3D convolutional neural network