

# IVCNZ 2022 Programme (version 23.11.2022) (\*) all given times are written in NZ local time (Auckland/Wellington)

## Thursday 24.11.2022

8:15 Registrations  
8:45 Opening address  
9:00 Keynote Mengjie Zhang (45min + 15min discussion)  
10:00 Session 1, Long presentations 2 x (15min + 5min discussion)  
10:40 Break 30min  
11:10 Session 2, Short presentations 5 x (8min + 2min discussion)  
12:10 Lunch  
13:10 Keynote Mohan Kankanhalli (45min + 15min discussion)  
14:10 Session 3, Long presentations 2 x (15min + 5min discussion)  
14:50 Break 25min  
15:15 Session 4, Short presentations 4 x (8min + 2min discussion)  
Mini-break  
16:00 Session 5, Long presentations 3 x (15min + 5min discussion)  
Mini-break  
17:05 Session 6, Short presentations 5 x (8min + 2min discussion)  
18:00 NZ Robotics, Automation & Sensing (NZRAS) AGM (until 18:30)  
19:30 Conference Dinner at **Palm Cafe, 2/5 Graham St, Auckland**  
(Close to the Sky Tower)

## Friday 25.11.2022

8:15 Registrations  
9:00 Keynote Nikola Kasabov (45min + 15min discussion)  
10:00 Session 7, Long presentations 2 x (15min + 5min discussion)  
10:40 Break 30min  
11:10 Session 8, Short presentations 5 x (8min + 2min discussion)  
12:10 Lunch/Steering Committee Meeting  
13:10 Keynote Dacheng Tao (45min + 15min discussion)  
14:10 Session 9, Long presentations 2 x (15min + 5min discussion)  
14:50 Break 25min  
15:15 Session 10, Long presentations 3 x (15min + 5min discussion)  
Mini-break  
16:20 Session 11, Short presentations 4 x (8min + 2min discussion)  
17:00 Closing Address and Awards (until 17:30)

## Time zone: Africa, Australia, Europe, New Zealand

### Session 1: Long presentations

4121 Yliess Hati, Vincent Thévenin, Florent Nolot, Francis Rousseaux and Clément Duhart. StencilTorch: an Iterative and User-Guided Framework for Anime Lineart Colorization  
4580 Asra Aslam and Edward Curry. UnseenNet: Fast Training Detector for Unseen Concepts with No Bounding Boxes

### Session 2: Short presentations

7095 Maarten Vandersteegen, Wouter Reusen, Kristof Van Beeck and Toon Goedeme. Person detection using an ultra low-resolution thermal imager on a low-cost MCU  
8544 Yi Xia, Minh Nguyen and Wei Qi Yan. A Real-time Kiwifruit Detection Based on Improved YOLOv7  
137 Deepthi Kuttichira, Basim Azam, Brijesh Verma, Ashfaqur Rahman and Lipo Wang. A Novel Explainable Deep Learning Model with Class Specific Features

661 Aaron Smith, James Atlas and Ali Atharifard. Correcting Charge Sharing Distortions in Photon Counting Detectors Utilising a Spatial-Temporal CNN  
2045 Xiaoxu Liu and Wei Qi Yan. Vehicle-Related Distance Estimation Using Customised YOLOv7

Session 7: Long presentations

8491 Artjoms Gorpincenko and Michal Mackiewicz. Extending Temporal Data Augmentation for Video Action Recognition  
8321 Fouzia Altaf, Syed Islam, Naeem Janjua and Naveed Akhtar. Pre-text Representation Transfer for Deep Learning with Limited & Imbalanced Data : Application to CT-ba

Session 8: Short presentations

1744 Amina Kammoun, Rim Slama, Hedi Tabia, Tarek Ouni and Mohamed Abid. FNR-GAN: Face Normalization and Recognition with Generative Adversarial Networks  
7150 Mingyang Zhang, Toon Goedemé and Kristof Van Beeck. Object Tracking with Multiple Dynamic Templates Updating  
6100 Eric Song, Sam Schofield and Richard Green. Detection and Tracking of Pinus Radiata Catkins  
9591 Zhicheng Pan, David Wilson and Martin Stommel. Assessing the Condition of Copper Conductors Using Deep Learning  
2186 Wenlong Fu, Bing Xue and Mengjie Zhang. Evolving U-Nets using Genetic Programming for Land Tree Segmentation

**Time zone: Australia, New Zealand**

Session 3: Long presentations

3606 Theodoros Dapamede, Krishna M. Chapagain, Mahdieh Moghiseh, James Atlas, Philip H. Butler, Anthony P. H. Butler and Mars Collaboration. Probability Mapping of S  
5841 Jinrong Wu, Su Nguyen and Damminda Alahakoon. Explainable Network Pruning for Model Acceleration based on Filter Similarity and Importance

Session 9: Long presentations

6905 Sam Schofield, Andrew Bainbridge-Smith and Richard Green. Outlier Detection for Visual Odometry in Vegetated Scenes using Local Flow Consistency  
6141 Mariia Khan, Jumana Abu-Khalaf, David Suter and Bodo Rosenhahn. M3T: Multi-Class Multi-Instance Multi-View Object Tracking for Embodied AI Tasks

Session 10: Long presentations

9138 Leo Venn and Steven Mills. A VR Tool for Labelling 3D Data Sets  
9971 Joachim Yde, Lance Chaney, Peter Vergerakis, Yuqiang Jin, Neha Sarwate, Alex Shaw and Burkhard Wuensche. Determining Realism of Procedurally Generated City Ro  
3020 Anastasia Mozhaeva, Valdimir Mazin, Michael Cree and Lee Streeter. VIDEO QUALITY ASSESSMENT CONSIDERING THE FEATURES OF THE HUMAN VISUAL SYSTEM

**Time zone: America, Asia, Australia, New Zealand**

Session 4: Short presentations

7019 Jianchun Qi, Minh Nguyen and Wei Qi Yan. Small Visual Object Detection in Smart Waste Classification Using Transformers with Deep Learning  
7379 Harsh Bhandari, Soumajit Chowdhury and Sarbani Palit. A Hybrid Human-Machine System for Image-Based Multi-Weather Detection

8593 Somrita Bakshi, Sarbani Palit, Ujjwal Bhattacharya, Debasis Mitra, Kimia Gholami and Nushrat Hussain. A novel CNN-based approach for distinguishing between COVID-19 and normal faces

5237 Muhammad Aasharib Nawshad and Muhammad Moazam Fraz. Improving Masked Face Recognition using Dense Residual Unit Aided with Quadruplet loss

Session 5: Long presentations

7982 Tao Jiang, Ming Zong, Yujun Ma, Feng Hou and Ruili Wang. MobileACNet: ACNet-based lightweight model for image classification

7663 Mahshid Sadeghpour, Arathi Arakala, Stephen Davis and Kathy Horadam. GRETINA: A Large-scale High-quality Generated Retinal Image Dataset for Security and Privacy

886 Dharma Kc, Clayton T. Morrison and Bradley Walls. Texture Generation Using A Graph Generative Adversarial Network And Differentiable Rendering

Session 6: Short presentations

3046 Jitender Singh, Dwarikanath Mahapatra and Deepti R. Bathula. Medical VQA: MixUp Helps Keeping it Simple

9962 Srinidhi Temkar, Amrutha Ukkalam, Sanket N D, Mahesh D and Shylaja S S. TTF-ST: Diversified Text to Face Image Generation using Best-Match Search and Latent Vec

5799 Abeer Banerjee, Himanshu Kumar, Sumeet Saurav and Sanjay Singh. Lensless Image Reconstruction with Untrained Neural Network

3283 Lalita Kumari, Sukhdeep Singh, Vaibhav Varish Singh Rathore and Anuj Sharma. A Lexicon and Depth-wise Separable Convolution Based Handwritten Text Recognition

7007 Alamgir Sardar, Saiyed Umer and Ranjeet Kr. Rout. Face Recognition System using Multicolor Image Analysis and Template Protection with BioCryptosystem

Session 11: Short presentations

2668 Taiki Arakane, Takeshi Saitoh, Ryuuichi Chiba, Masanori Morise and Yasuo Oda. Conformer-based Lip-reading for Japanese Sentence

845 Suraj Kumar Pandey and Shivashankar B. Nair. Immuno-inspired Augmentation of Siamese Neural Network for Multi-Class Classification

2423 Yu Wang, Bo Liu, Fugen Zhou and Yinuo Wang. PCMask : A Dual-Branch Self-Supervised Medical Image Segmentation Method Using Pixel-Level Contrastive Learning

7943 Towa Yamabe and Takeshi Saitoh. Vision Transformer-based Bark Image Recognition for Tree Identification