

## Wednesday 28th August 2019

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12:00	Registration desk open	
14:00	<b>Welcome and Opening Remarks: Prof David FitzPatrick, President of TU Dublin</b>	
<b>Keynote Address</b>	<b>Keynote Address: David Moloney of Intel Movidius</b>	<b>Dr Jane Courtney</b>
14:20	<b>The Edge of Reason – Transforming IoT Through Edge-Inference</b>	
15:20	Coffee Break	
<b>Session 1</b>	<b>Active Vision, Tracking and Motion Analysis</b>	<b>Dr John McDonald</b>
15:50	<b>Multi-Person tracking by multi-scale detection in Basketball scenarios</b> Adrià Arbués-Sangüesa, Gloria Haro and Coloma Ballester	
16:10	<b>Comparison of Activity Recognition using 2D and 3D Skeletal Joint Data</b> Fiona Marshall, Shuai Zhang and Bryan Scotney	
16:30	<b>Micro Expression Classification Accuracy Assessment</b> Pratikshya Sharma, Sonya Coleman, Pratheepan Yogarajah and Laurence Taggart	
16:50	<b>Human Action Recognition in Videos using Transfer Learning</b> Kaiqiang Huang, Sarah Jane Delany and Susan Mckeever	
<b>Reception</b>	<b>MVIP 2019 Welcome Reception</b>	
17:30	Rathdown House, Grangegorman	

## Thursday 29th August 2019

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<b>Session 2</b>	<b>Deep Learning for Computer Vision</b>	<b>Dr Robert Ross</b>
09:00	<b>Solid Spherical Energy (SSE) CNNs for Efficient 3D Medical Image Analysis</b> Vincent Andrearczyk, Valentin Oreiller, Julien Fageot, Xavier Montet and Adrien Depeursinge	
09:20	<b>Deep Convolutional Neural Networks for estimating lens distortion parameters</b> Sebastian Lutz, Mark Davey and Aljosa Smolic	
09:40	<b>Entropic Regularisation of Robust Optimal Transport</b> Rozenn Dahyot, Hana Alghamdi and Mairead Grogan	
10:00	<b>Comparing Data Augmentation Strategies for Deep Image Classification</b> Sarah O'Gara and Kevin McGuinness	

Poster Session / Coffee Break	Poster Session / Coffee Break	
10:20	<b>A simple deep learning architecture for city-scale vehicle re-identification</b> Eleni Kamenou, Jesus Martinez del Rincon, Paul Miller and Patricia Devlin Hill <b>Pathological Speech Classification Using a Convolutional Neural Network</b> Nam Trinh and Darragh O'Brien <b>Denoising RENOIR Image Dataset with DBSR</b> Fatma Albluwi, Vladimir Krylov and Rozenn Dahyot <b>Deep CNN Based Framework for Malaria Diagnosis</b> Priyadarshini Adyasha Pattanaik, Zelong Wang and Patrick Horain <b>MouldingNet: Deep-Learning for 3D Object Reconstruction</b> Tobias Burns, Barak Pearlmutter and John McDonald <b>Place Recognition for Challenging Conditions</b> Saravanabalagi Ramachandran and John McDonald	
<b>Session 3</b>	<b>Deep Learning for Computer Vision</b>	<b>Dr Rozenn Dahyot</b>
10:50	<b>No Room For Squares: Using Bitmap Masks to Improve Pedestrian Detection Using CNNs</b> Adam Warde, Hamza Yous, David Moloney and David Gregg	
11:10	<b>Improving Unsupervised Learning with Exemplar CNNs</b> Eric Arazo, Noel O'Connor and Kevin McGuinness	
11:30	<b>Multi-spectral visual crop assessment under limited data constraints</b> Patricia O'Byrne, Patrick Jackman, Damon Berry, Hector-Hugo Franco-Penya, Michael French and Robert	
11:50	<b>Synthetic Data Augmentation for Facial Re-identification</b> Glen Brown, Jesus Martinez-Del-Rincon and Paul Miller	
<b>Session 4</b>	<b>2D, 3D Scene Analysis and Visualisation</b>	<b>Dr Bryan Scotney</b>
12:10	<b>Ghost towns-Semantically Labelled Object Removal from Video</b> William Clifford and Charles Markham	
12:30	<b>Object Position Labelling in Video using PRBS Audio Multilateration</b> Padraic McEvoy, Paul Leamy and Ted Burke	
12:50	<b>What Does a Drone See? How Aerial Data Resolution Impacts Data Protection.</b> Jonathan Byrne, David Moloney and Brian Quinn	
<b>Lunch</b>		
13:10	<b>Lunch</b>	
<b>Keynote Address</b>	<b>Keynote Address : Paul F Whelan of DCU</b>	<b>Dr Catherine Deegan</b>
14:10	<b>Computer Vision for Biomedical Applications: From Surface to Sub-Cell</b>	
15:10	Coffee Break	
<b>Session 5</b>	<b>Medical and Biomedical Imaging</b>	<b>Prof Paul Whelan</b>
15:40	<b>Eulerian Video Magnification Adaptation for Live Cell Microscopy Analysis</b> Paul Leamy and Jane Courtney	
16:00	<b>Measuring surgical knot tying with 3D vision and VR gloves</b>	

16:20	JhiliK Bhattacharya, Paul Ridgway and Gerard Lacey <b>Counting Platelets: A Novel Image Analysis Algorithm for Detecting and Counting Platelet Adhesion on</b> Thomas Lee, Niamh Gilmartin, Damon Berry and Jane Courtney
16:40	<b>Cross-Correlation Template Matching for Liver Localisation in Computed Tomography</b> Patrick Leydon, Derek Greene, Martin O'Connell and Kathleen Curran
17:00	<b>Tracking Hand Trajectory as a preliminary study for Hand Hygiene stages</b> Rashmi Bakshi, Jane Courtney, Damon Berry and Graham Gavin

### Banquet

### IMVIP 2019 Conference Dinner

19:00 The Gresham Hotel, O'Connell Street, Dublin

### Friday 30th August 2019

### Session 6

### Applications, Architectures and Systems Integration

Dr Damon Berry

09:30	<b>A Machine Learning Approach to Wafer Defect Classification using Bag of Visual Words</b> Terence Sweeney, Sonya Coleman and Dermot Kerr
09:50	<b>FisheyeMultiNet: Real-time Multi-task Learning Architecture for Surround-view Automated Parking</b> Pullarao Maddu and Senthil Yogamani
10:10	<b>An Efficient Approach to Automatic Generation of Time-lapse Video Sequences</b> Javier Calero de Torres, Bryan Gardiner, Sandra Moffett, Ilias Dahi, Marco Herbst and Joan Condell
10:30	<b>Development of a Nano Drop Shape Analysis Tool For Installation in a Novel Nano Drop</b> Colin Monaghan and Jane Courtney

### Poster Session / Coffee Break

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10:50	<b>Synthetic Positron Emission Tomography Using Conditional-Generative Adversarial Networks for</b> Patrick Leydon, Derek Greene, Martin O'Connell and Kathleen Curran <b>Neuromorphic Event-based Action Recognition</b> Shane Harrigan, Sonya Coleman, Dermot Kerr, Pratheepan Yogarajah, Zheng Fang and Chengdong Wu <b>FisheyeMODNet: Moving Object detection on Surround-view Cameras for Autonomous Driving</b> Marie Yahiaoui, Hazem Rashed, Letizia Mariotti and Senthil Yogamani <b>Real Time Detection and Analysis of Facial Features to Measure Student Engagement with Learning</b> Conor Cohen Farrell, Charles Markham and Catherine Deegan <b>Visualizing and interpreting feature reuse of pretrained CNNs for histopathology</b> Mara Graziani, Vincent Andrearczyk and Henning Muller <b>Spatial Coherency in Colourisation</b> Sean Mullery and Paul Whelan
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### Best Paper Awards & Closing Remarks

Dr Jane Courtney

11:30 St. Laurence's Church, Grangegorman