CONFERENCE AGENDA

CVC 2019
25–26 April, Las Vegas

DAY 1 (25th April)

8:00 am – 8:30 am	**Delegates Check-in**
8:30 am – 10:30 am	**KEYNOTE TALKS** Marina L. Gavrilova, University of Calgary Jon G Peddie, JPR
10:30 am – 11:00 am	**NETWORKING BREAK**
11:00 am - 12:30 pm	**PAPER PRESENTATIONS** Session 1 - Deep Learning for Vision Session 2 - Image Processing Session 3 - Machine Vision and Learning
12:30 pm – 1:30 pm	**LUNCH**
1:30 pm – 3:30 pm	**PAPER PRESENTATIONS** Session 4 - Deep Learning for Vision Session 5 - Image Processing Session 6 - Machine Vision and Learning
3:30 pm - 4:30 pm	**POSTER PRESENTATIONS**
4:30 pm - 7:30 pm	**EVENING LAS VEGAS BUS TOUR** Capture the sights of Las Vegas at their glittering best during the 3-hour panoramic city tour.

DAY 2 (26th April)

8:00 am – 8:30 am	**Delegates Arrive**
8:30 am – 10:15 am	**KEYNOTE TALKS** Nasseh Tabrizi, East Carolina University Juan Pablo Wachs, Purdue University
10:15 am - 10:30 am	**NETWORKING BREAK**
10:30 am – 12:30 pm	**PAPER PRESENTATIONS** Session 7 - Computer Vision Applications Session 8 - Image Processing Session 9 - Data Science
12:30 pm – 1:30 pm	**LUNCH**
1:30 pm – 3:30 pm	**PAPER PRESENTATIONS** Session 10 - Computer Vision Applications Session 11 - Image Processing Session 12 - Data Science
3:30 pm – 3:45 pm	**NETWORKING BREAK**
3:45 pm – 5:30 pm	**PAPER PRESENTATIONS** Session 13 - Computer Vision Applications Session 14 - Image Processing Session 15 - Machine Vision and Learning
5:30 pm – 6:00 pm	**Closing Ceremony**

25th April 2019 (11:00 am - 12:30 pm)

PAPER PRESENTATIONS

Session 1 - Deep Learning for Vision Session Chair: Sotirios Diamantas (Room: Vinoly)	**Session 2 - Image Processing** Session Chair: Xianping Li (Room: Rafael 1)	**Session 3 - Machine Vision and Learning** Session Chair: Ali Alouani (Room: Rafael 2)
34 - Deep Learning for Detection of Railway Signs and Signals (Presenter: Georgios Karagiannis)	32 - MAP Interpolation of an Ising Image Block (Presenter: Matt Reyes)	76 - Ursa: A Neural Network for Unordered Point Clouds using Constellations (Presenter: Mark Skouson)
66 - 3D Conceptual Design using Deep Learning (Presenter: Lan Zou)	42 - Volumetric Data Exploration with Machine Learning- Aided Visualization in Neutron Science (Presenter: Yaohua Liu)	83 - Context-Based Object Recognition: Indoor Versus Outdoor Environments (Presenter: Ali Alameer)
87 - Weakly Supervised Deep Metric Learning for Template Matching (Presenter: Davit Buniatyan)	51 - License Plate Character Recognition using Binarization and Convolutional Neural Networks (Presenter: Melvin Robinson)	1 - Automatic Nucleus Segmentation with Mask-RCNN (Presenter: Jeremiah Johnson)
73 - The Effect of Color Channel Representations on the Transferability of Convolutional Neural Networks (Presenter: Javier Diaz-Cely)	64 - 3D-Holograms in Real Time for Representing Virtual Scenarios (Presenter: Jesus-Jaime Moreno-Escobar)	2 - Stereo Vision based Object Detection using V-Disparity and 3D Density-Based Clustering (Presenter: Shubham Shrivastava)
136 - Transfer Probability Prediction for Traffic Flow with Bike Sharing Data: A Deep Learning Approach (Presenter: Wenwen Tu)	22 - Robust Pedestrian Detection based on Parallel Channel Cascade Network (Presenter: JiaoJiao He)	166 - Constrainted Loss Function for Classification Problems (Presenter: Haozhi Huang)
119 - Nature Inspired Meta-Heuristic Algorithms for Deep Learning: Recent Progress and Novel Perspective (Presenter: Abdulsalam Gital)	25 - Novel Scheme for Image Encryption and Decryption based on a Hermite-Gaussian Matrix (Presenter: Mohammed Alsaedi)	40 - Performance Evaluation of Autoencoders for One-shot Classification of Infectious Chlamydospore (Presenter: Raphael Alampay)

25th April 2019 (01:30 pm – 3:30 pm)

PAPER PRESENTATIONS

Session 4 - Deep Learning for Vision Session Chair: Xianping Li (Room: Vinoly)	**Session 5 - Image Processing** Session Chair: Laura Inzerillo (Room: Rafael 1)	**Session 6 - Machine Vision and Learning** Session Chair: Ali Alouani (Room: Rafael 2)
147 - CanvasGAN: A Simple Baseline for Text to Image Generation by Incrementally Patching a Canvas (Presenter: Sharan Agrawal)	67 - A Probabilistic Superpixel-Based Method for Road Crack Network Detection (Presenter: Josiah Steckenrider)	238 - Minimizing the Worst Case Execution Time of Diagnostic Fault Queries in Real Time Systems using Genetic Algorithm (Presenter: Nadra Tabassam, Sarah Amin)
149 - Unsupervised Dimension Reduction for Image Classification using Regularized Convolutional Auto-Encoder (Presenter: Shiping Wang)	176 - Towards Resolving the Kidnapped Robot Problem: Topological Localization from Crowdsourcing and Georeferenced Images (Presenter: Sotirios Diamantas)	251 - MNIST Dataset Classification Utilizing k-NN Classifier with Modified Sliding-Window Metric (Presenter: Divas Grover)
171 - Deep Learning vs. Traditional Computer Vision (Presenter: Niall O Mahony)	88 - License Plate Detection and Recognition: An Empirical Study (Presenter: Steven Beauchemin)	297 - Specular Photometric Stereo for Surface Normal Estimation of Dark Surfaces (Presenter: Mengyu Song)
208 - Self-Localization from a 360-Degree Camera based on the Deep Neural Network (Presenter: Shintaro Hashimoto)	89 - Automatic Object Segmentation based on GrabCut (Presenter: Feng Jiang)	131 - CapsGAN: Using Dynamic Routing for Generative Adversarial Networks (Presenter: Raeid Saqur, Salvatore Vivona)
253 - Deep Cross-Modal Age Estimation (Presenter: Ali Aminian)	97 - PZnet: Efficient 3D ConvNet Inference on Manycore CPUs (Presenter: Sergiy Popovych)	80 - Persistent Homology for Detection of Objects from Mobile LiDAR Point Cloud Data in Autonomous Vehicles (Presenter: Hassan Karimi)
273 - Multi-Stage Reinforcement Learning for Object Detection (Presenter: Sebastian Niehaus)	99 - Evaluating Focal Stack with Compressive Sensing (Presenter: Mohammed Abuhussein)	102 - Automatic Recognition System for Dysarthric Speech based on MFCC's, PNCC's, JITTER and SHIMMER Coefficients (Presenter: Brahim Fares Zaidi)
278 - Road Weather Condition Estimation using Fixed and Mobile based Cameras (Presenter: Koray Ozcan)	84 - Image Recognition Model over Augmented Reality based on Convolutional Neural Networks through Color-space Segmentation (Presenter: Daniel Casas)	178 - 3M2RNet: Multi-Modal Multi-Resolution Refinement Network for Semantic Segmentation (Presenter: Shohreh Kasaei)
	92 - Vertebral Body Compression Fracture Detection (Presenter: Serife Kaba)	

26th April 2019 (10:30 am – 12:30 pm)

PAPER PRESENTATIONS

Session 7 - Computer Vision Applications Session Chair: Susan Taylor (Room: Vinoly)	**Session 8 - Image Processing** Session Chair: Xianping Li (Room: Rafael 1)	**Session 9 - Data Science** Session Chair: Kirk Atkinson (Room: Rafael 2)
41 - Feature Map Transformation for Multi-Sensor Fusion in Object Detection Networks for Autonomous Driving (Presenter: Enrico Schroeder)	110 - SfM Techniques Applied in Bad Lighting and Reflection Conditions: The Case of a Museum Artwork (Presenter: Laura Inzerillo)	35 - Using Data Analytics to Predict Healthcare Facility Resource Demand and Utilization During a Crisis (Presenter: Kirk Atkinson)
279 - Near Real-Time Robotic Grasping of Novel Objects in Cluttered Scenes (Presenter: Aman Behal, Amirhossein Jabalameli)	113 - Fast Brain Volumetric Segmentation from T1 MRI Scans (Presenter: Ananya Anand)	294 - Asymmetric Laplace Mixture Modelling of Incomplete Power-Law Distributions: Application to 'Seismicity Vision' (Presenter: Arnaud Mignan)
245 - On Image based Enhancement for 3D Dense Reconstruction of Low Light Aerial Visual Inspected Environments (Presenter: Christoforos Kanellakis)	128 - No-Reference Image Denoising Quality Assessment (Presenter: Si Lu)	281 - Data-Driven Multi-step Demand Prediction for Ride-hailing Services using Convolutional Neural Network (Presenter: Chao Wang, Yi Hou)
230 - Accident Recognition via 3D CNNs for Automated Traffic Monitoring in Smart Cities (Presenter: Adil Khan)	138 - Fusion of CNN- and COSFIRE-Based Features with Application to Gender Recognition from Face Images (Presenter: George Azzopardi)	236 - Building Adaptive Industry Cartridges using a Semi-supervised Machine Learning Method (Presenter: Lucia Stavarache)
85 - Design and Evaluation of a Virtual Reality-Based Car Configuration Concept (Presenter: Rüdiger Pryss)	150 - Standardization of the Shape of Ground Control Point (GCP) and the Methodology for its Detection in Images for UAV-based Mapping Applications (Presenter: Radha Saraf, Milind Mahajan)	237 - Decision Making with Linguistic Information for the Development of New Products (Presenter: Santiago Zapata)
77 - AutoViDev: A Computer-vision Framework to Enhance and Accelerate Research in Human Development (Presenter: Ori Ossmy)	155 - Non-Linear-Optimization using SQP for 3D Deformable Prostate Model Pose Estimation in Minimally Invasive Surgery (Presenter: Marco Gribaudo)	241 - Selection of Personnel Based on Multicriteria Decision Making and Fuzzy Logic (Presenter: Santiago Zapata)
156 - Seeking Optimum System Settings for Physical Activity Recognition on Smartwatches (Presenter: Muhammad Ahmad)	160 - TLS-Point Clouding-3D Shape Deflection Monitoring (Presenter: Seunghee Park)	144 - Systematic Mobile Device Usage Behavior and Successful Implementation of TPACK based on University Students Need (Presenter: Syed Hossain)
227 - SURF based Copy Move Forgery Detection using kNN Mapping (Presenter: Kelvin Harrison Paul)		

26th April 2019 (01:30 pm – 3:30 pm)

PAPER PRESENTATIONS

Session 10 - Computer Vision Applications Session Chair: Sotirios Diamantas (Room: Vinoly)	**Session 11 - Image Processing** Session Chair: Feng Jiang (Room: Rafael 1)	**Session 12 - Data Science** Session Chair: Kirk Atkinson (Room: Rafael 2)
248 - An Efficient Approach for Detecting Moving Objects and Deriving their Positions and Velocities (Presenter: Andreas Gustavsson) 256 - Human Tracking for Facility Surveillance (Presenter: Shin-Yi Wen) 26 - Cooperation of Virtual Reality and Real Objects with HoloLens (Presenter: Jindrich Cyrus) 255 - Adaptive Fusion of Sub-band Particle Filters for Robust Tracking of Multiple Objects in Video (Presenter: Sherif Sherif) 37 - Ontology of Ubiquitous Learning: WhatsApp Messenger Competes Successfully with Learning Management Systems (LMS) (Presenter: William Koomson) 117 - Hybrid Navigation Information System for Minimally Invasive Surgery: Offline Sensors Registration (Presenter: Ali Alouani) 298 - Identifying Emerging Trends and Temporal Patterns about Self-driving Cars in Scientific Literature (Presenter: Workneh Yilma Ayele) 11 - Automatic Detection of Vibration Patterns During Production Test of Aircraft Engines (Presenter: Julien Griffaton)	164 - From Videos to URLs: A Multi-Browser Guide to Extract User's Behavior with Optical Character Recognition (Presenter: Mojtaba Heidarysafa) 173 - 3D Reconstruction under Weak Illumination using Visibility-Enhanced LDR Imagery (Presenter: Nader Aldeeb) 175 - DynFace: A Multi-Label, Dynamic-Margin-Softmax Face Recognition Model (Presenter: Dan Ionescu) 181 - Using the Z-belISM Test to Remediate Spatial Deficiencies in Non-Image-Forming Retinal Processing (Presenter: Clark Elliott) 187 - Learning of Shape Models from Exemplars of Biological Objects in Images (Presenter: Petra Perner) 210 - A New Technique for Laser Spot Detection and Tracking by using Optical Flow and Kalman Filter (Presenter: Xiuli Wang) 226 - Historical Document Image Binarization based on Edge Contrast Information (Presenter: Zhenjiang Li) 239 - Development and Laboratory Testing of a Multipoint Displacement Monitoring System (Presenter: Gerry Hamill, Susan Taylor, Myra Lydon)	240 - Researcher Profile Ontology for Academic Environment (Presenter: Maricela Bravo) 304 - Proactive Management of Regulatory Policy Ripple Effects via Computational Hierarchical Change Management Structure (Presenter: Abdulrahman Alrabiah) 308 - Iceberg Detection by CNN based on Incidence-Angle Confusion (Presenter: Yongli Zhu) 310 - The Effectiveness of Distinctive Information for Cancer Cell Analysis through Big Data (Presenter: Babu Kaji Baniya) 159 - Data Analysis of Tourists' Online Reviews on Restaurants in a Chinese Website (Presenter: Gee-Woo Bock) 313 - Forecasting Food Sales in a Multiplex using Dynamic Artificial Neural Networks (Presenter: Adithya V Ganesan)

26th April 2019 (03:45 pm – 5:30 pm)

PAPER PRESENTATIONS

Session 13 - Computer Vision Applications Session Chair: Laura Inzerillo (Room: Vinoly)	**Session 14 - Image Processing** Session Chair: Feng Jiang (Room: Rafael 1)	**Session 15 - Machine Vision and Learning** Session Chair: Susan Taylor (Room: Rafael 2)
246 - Robots in Healthcare: A Survey (Presenter: Arshia Khan)	252 - Quantitative Comparison of White Matter Segmentation for Brain MR Images (Presenter: Xianping Li)	3 - Building a Weighted Graph to Avoid Obstacles from an Image of the Environment (Presenter: Kevin Prehn, John Jeffrey)
65 - Cross-Safe: A Computer Vision-Based Approach to Make All Intersection-Related Pedestrian Signals Accessible for the Visually Impaired (Presenter: Hanzhang Cui)	258 - Evaluating the Implementation of Deep Learning in LibreHealth Radiology on Chest X-Rays (Presenter: Judy Gichoya)	174 - Machine Learning and Education in the Human Age: A Review of Emerging Technologies (Presenter: Catherine Bacos)
79 - Application of Remote Sensing for Automated Litter Detection and Management (Presenter: Mark J Hamill)	299 - Bayesian Estimation for Fast Sequential Diffeomorphic Image Variability (Presenter: Youshan Zhang)	216 - Cognitive Consistency Routing Algorithm of Capsule-Network (Presenter: Huayu Li)
103 - Using Computer Vision Techniques for Parking Space Detection in Aerial Imagery (Presenter: Vamsi Paruchuri)	276 - An Attention-Based CNN for ECG Classification (Presenter: Alexander Kuvaev)	288 - Using a 3D Computer Vision System for Inspection of Reinforced Concrete Structures (Presenter: Sameer Hamoush)
312 - Making a Simple Game in Unreal™ Engine: Survival Knight (Presenter: Sudhanshu Semwal)	296 - Reverse Engineering of Generic Shapes using Quadratic Spline and Genetic Algorithm (Presenter: Misbah Irshad)	197 - XMIAR: X-Ray Medical Image Annotation and Retrieval (Presenter: Mohammed Abdulrazzaq)
307 - Towards Approximate Sphere Packing Solutions using Distance Transformations and Dynamic Logic (Presenter: Sudhanshu Semwal)	262 - Illumination-Invariant Face Recognition by Fusing Thermal and Visual Images via Gradient Transfer (Presenter: Sumit Agarwal)	285 - Visual Percepts Quality Recognition using Convolutional Neural Networks (Presenter: Laurence Gan Lim)
229 - A Preliminary Approach to using PRNU based Transfer Learning for Camera Identification (Presenter: Sharan Seshadri)		91 - Comparison of Machine Learning Algorithms for Classification Problems (Presenter: Shakar Sherwan Hasan)