

Oral 3A / Poster 3	
Topic: Applications 1	
17	SketchTransfer: A New Dataset for Exploring Detail-Invariance and the Abstractions Learned by Deep Networks
38	SVIRO: Synthetic Vehicle Interior Rear Seat Occupancy Dataset and Benchmark
343	Supervised and Unsupervised Learning of Parameterized Color Enhancement
490	ADNet: Adaptively Dense Convolutional Neural Networks
544	Exploring 3 R's of Long-term Tracking: Redetection, Recovery and Reliability
683	Openset: The overlooked elephant of object detection
724	Probabilistic Object Detection: Definition and Evaluation
741	DeepPTZ: Deep Self-Calibration for PTZ Cameras
798	Self-Orthogonality Module: A Network Architecture Plug-in for Learning Orthogonal Filters
929	Evaluation of Image Inpainting for Classification and Retrieval
969	Adversarial Examples for Edge Detection: They Exist, and they Transfer
1026	Spatio-Temporal Pyramid Graph Convolutions for Human Action Recognition and Postural Assessment
1233	An Empirical Study of Deep Models for Monocular Depth Estimation
1264	I-MOVE: Independent Moving Objects for Velocity Estimation
81	Real-time lead vehicle distance estimation using single view geometry assisted by deep learning
83	SmartOverlays: A Visual Saliency Driven Label Placement for Intelligent Human-Computer Interfaces
112	Class-incremental Learning via Deep Model Consolidation
121	Cooperative Initialization based Deep Neural Network Training
148	Self-Growing Spatial Graph Networks for Pedestrian Trajectory Prediction
181	ImaGINator: Conditional Spatio-Temporal GAN for Video Generation
188	One-to-one Mapping for Unpaired Image-to-image Translation
216	ViP: Virtual Pooling for Accelerating CNN-based Image Classification and Object Detection
229	Learn a Global Appearance Semi-Supervisedly for Synthesising Person Images
333	ReStGAN: A step towards visually guided shopper experience via text-to-image synthesis

Oral 3B / Poster 3	
Topic: Object Recognition 2	
557	A Multi-Space Approach to Zero-Shot Object Detection
560	L*ReLU: Piece-wise Linear Activation Functions \ for Deep Fine-grained Visual Categorization
564	An Adversarial Domain Adaptation Network for Cross-Domain Fine-Grained Recognition
576	Generative Model with Semantic Embedding and Integrated Classifier for Generalized Zero-Shot Learning
619	ELOPE: Fine-Grained Visual Classification with Efficient Localization, Pooling and Embedding
638	Scale Match for Tiny Person Detection
653	ScalL: Classifier Weights Scaling for Class Incremental Learning
667	Extracting identifying contours for African elephants and humpback whales using a learned appearance model
670	Anchor Box Optimization for Object Detection
696	GAR: Graph Assisted Reasoning for Object Detection
747	Improving Object Detection with Inverted Attention
752	Instance Segmentation of Benthic Scale Worms at a Hydrothermal Site
793	Multi-Scale Adversarial Cross-Domain Detection with Robust Discriminative Learning
909	Compositional Convolutional Networks For Robust Object Classification under Occlusion
920	Robust estimation of local affine maps and its applications to image matching
921	Multi-way Encoding for Robustness
949	Robust Face Detection via Learning Small Faces on Hard Images
953	Deep Learning on Small Datasets without Pre-Training using Cosine Loss
1046	A Novel Self-Supervised Re-labeling Approach for Training with Noisy Labels
1089	Crowded Human Detection via an Anchor-pair Network
1148	Multi-class Novelty Detection Using Mix-up Technique
1157	Analysis and a Solution of Momentarily Missed Detection for Anchor-based Object Detectors
1178	DATNet: Dense auxiliary tasks for object detection
1184	Active Learning for Imbalanced Datasets
1263	Animal Detection in Man-made Environments

Oral 4B / Poster 4	
Topic: Robotics	
49	Video Object Segmentation-based Visual Servo Control and Object Depth Estimation on a Mobile Robot
537	Robust Feature Tracking in DVS Event Stream using Bezier Mapping
674	SymGAN: Orientation Estimation without Annotation for Symmetric Objects
847	QUICKSAL: A small and sparse visual saliency model for efficient inference in resource constrained hardware
1053	MonoLayout: Amodal scene layout from a single image
1244	Frustum VoxNet for 3D object detection from RGB-D or Depth images
281	Cross-View Contextual Relation Transferred Network for Unsupervised Vehicle Tracking in Drone Videos
315	Unsupervised and Semi-Supervised Domain Adaptation for Action Recognition from Drones
479	Localizing Grouped Instances for Efficient Detection in Low-Resource Scenarios
492	Reconstructing Road Network Graphs from both Aerial Lidar and Images
555	BIRDSAI: A Dataset for Detection and Tracking in Aerial Thermal Infrared Videos
1119	Dual-Mode Training with Style Control and Quality Enhancement for Road Image Domain Adaptation
1186	Periphery-Fovea Multi-Resolution Driving Model guided by Human Attention
178	Deep Remote Sensing Methods for Methane Detection in Overhead Hyperspectral Imagery
770	Extraction of Road Topology and Travel Times with Satellite Imagery
931	Cloud Removal from Satellite Images using Spatiotemporal Generator Networks
1106	Single Satellite Optical Imagery Dehazing using SAR Image Prior Based on conditional Generative Adversarial Networks
1311	The Synthinel-1 dataset: a collection of high resolution synthetic overhead imagery for building segmentation
524	Efficient Object Detection in Large Images Using Deep Reinforcement Learning
277	Lane detection using lane boundary marker network with road geometry constraints

Oral 5A / Poster 5	
Topic: Segmentation	
42	It's All About The Scale - Efficient Text Detection Using Adaptive Scaling
62	Casting Geometric Constraints in Semantic Segmentation as Semi-Supervised Learning
85	MLSL : Multi-Level Self-Supervised Learning for Domain Adaptation with Spatially Independent and Semantically Consistent Labeling
100	FuseSeg: LiDAR Point Cloud Segmentation Fusing Multi-Modal Data
123	Multi Receptive Field Network for Semantic Segmentation
236	DIPNet: Dynamic Identity Propagation Network for Video Object Segmentation
284	Representing Objects in Video as Space-Time Volumes by Combining Top-Down and Bottom-Up Processes
313	Dense Extreme Inception Network: Towards a Robust CNN Model for Edge Detection
400	Can I teach a robot to replicate a line art
415	Multiview Co-segmentation for Wide Baseline Images using Cross-view Supervision
436	Shape Constrained Network for Eye Segmentation in the Wild
523	ROSS: Robust Learning of One-shot 3D Shape Segmentation
547	Architecture Search of Dynamic Cells for Semantic Video Segmentation
549	Template-Based Automatic Search of Compact Semantic Segmentation Architectures
585	Simultaneous Detection and Removal of Dynamic Objects in Multi-view Images
666	UnOVOST: Unsupervised Offline Video Object Segmentation and Tracking
702	Leveraging Pretrained Image Classifiers for Language-Based Segmentation
704	Quadtree Generating Networks: Efficient Hierarchical Scene Parsing with Sparse Convolutions
946	MaskPlus: Improving Mask Generation for Instance Segmentation
1088	VRT-Net: Real-Time Scene Parsing Via Variable Resolution Transform
1097	RPM-Net: Robust Pixel-Level Matching Networks for Self-Supervised Video Object Segmentation
1108	SINet: Extreme Lightweight Portrait Segmentation Networks with Spatial Squeeze Module and Information Blocking Decoder
1243	Multi-Modal Elements Association Approach for Form Structure Extraction

	Oral 5B / Poster 5	
	Topic: Applications 2	
405		Multiparty Visual Co-Occurrences for Estimating Personality Traits in Group Meetings
411		Uncertainty-aware Short-term Motion Prediction of Traffic Actors for Autonomous Driving
433		Image identification of Protea species with attributes and subgenus scaling
442		Reverse Variational Autoencoder for Visual Attribute Manipulation and Anomaly Detection
445		QR-code Reconstruction from Event Data via Optimization in Code Subspace
449		Region Pooling with Adaptive Feature Fusion for End-to-End Person Recognition
450		Event-based Star Tracking via Multiresolution Progressive Hough Transforms
482		Toward Explainable Fashion Recommendation
535		Self-Contained Stylization via Steganography for Reverse and Serial Style Transfer
593		Adversarial Discriminative Attention for Robust Anomaly Detection
607		SieveNet: A Unified Framework for Robust Image-Based Virtual Try-On
628		A Flexible Selection Scheme for Minimum-Effort Transfer Learning
635		Multi-Label Visual Feature Learning with Attentional Aggregation
671		Instance Segmentation for the Quantification of Microplastic-Fiber Images
711		Charting the Right Manifold: Manifold Mixup for Few-shot Learning
740		Measuring the Utilization of Public Open Spaces by Deep Learning: a Benchmark Study at the Detroit Riverfront
831		Erasing Scene Text with Weak Supervision
843		Image Matters: Scalable Detection of Offensive and Non-compliant Content / Logo in Product Images
1012		Very Power Efficient Neural Time-of-Flight
1037		Semantic Consistency and Identity Mapping Multi-Component Generative Adversarial Network for Person Re-Identification
1080		Structured Compression of Deep Neural Networks with Debiased Elastic Group LASSO
1102		Plug-and-Play Rescaling Based Crowd Counting in Static Images
1105		Looking Ahead: Anticipating Pedestrians Crossing with Future Frames Prediction
1128		Post-Mortem Iris Recognition Resistant to Biological Eye Decay Processes
1208		Fungi Recognition: A Practical Use Case