

35th AAAI Conference on Artificial Intelligence (AAAI-21)

Volume 3: AAAI Technical Tracks

- Computer Vision II

Online
2 – 9 February 2021

Part 1 of 2

ISBN: 978-1-7138-3589-9

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2021) by Association for the Advancement of Artificial Intelligence
All rights reserved.

Printed with permission by Curran Associates, Inc. (2021)

For permission requests, please contact Association for the Advancement of Artificial Intelligence
at the address below.

Association for the Advancement of Artificial Intelligence
2275 East Bayshore Road
Suite 160
Palo Alto, California 94303
USA

Phone: 1-650-328-3123
Fax: 1-650-321-4457

<https://aaai.org/Press/press.php>

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

PART 1

AAAI TECHNICAL TRACK ON COMPUTER VISION II

CROSS-DOMAIN GROUPING AND ALIGNMENT FOR DOMAIN ADAPTIVE SEMANTIC SEGMENTATION	1799
<i>Minsu Kim, Sunghun Joung, Seungryong Kim, Jungin Park, Ig-Jae Kim, Kwanghoon Sohn</i>	
BIDIRECTIONAL RNN-BASED FEW SHOT LEARNING FOR 3D MEDICAL IMAGE SEGMENTATION	1808
<i>Soopil Kim, Sion An, Philip Chikontwe, Sang Hyun Park</i>	
DASZL: DYNAMIC ACTION SIGNATURES FOR ZERO-SHOT LEARNING	1817
<i>Tae Soo Kim, Jonathan Jones, Michael Peven, Zihao Xiao, Jin Bai, Yi Zhang, Weichao Qiu, Alan Yuille, Gregory D. Hager</i>	
MULTI-LEVEL DISTANCE REGULARIZATION FOR DEEP METRIC LEARNING	1827
<i>Yonghyun Kim, Wonpyo Park</i>	
DYNAMIC TO STATIC LIDAR SCAN RECONSTRUCTION USING ADVERSARIALLY TRAINED AUTO ENCODER	1836
<i>Prashant Kumar, Sabyasachi Sahoo, Vanshil Shah, Vineetha Kondameedi, Abhinav Jain, Akshaj Verma, Chiranjib Bhattacharyya, Vinay Vishwanath</i>	
REGULARIZING ATTENTION NETWORKS FOR ANOMALY DETECTION IN VISUAL QUESTION ANSWERING	1845
<i>Doyup Lee, Yeongjae Cheon, Wook-Shin Han</i>	
WEAKLY-SUPERVISED TEMPORAL ACTION LOCALIZATION BY UNCERTAINTY MODELING	1854
<i>Pilhyeon Lee, Jinglu Wang, Yan Lu, Hyeran Byun</i>	
LEARNING MONOCULAR DEPTH IN DYNAMIC SCENES VIA INSTANCE-AWARE PROJECTION CONSISTENCY	1863
<i>Seokju Lee, Sunghoon Im, Stephen Lin, In So Kweon</i>	
PATCH-WISE ATTENTION NETWORK FOR MONOCULAR DEPTH ESTIMATION	1873
<i>Sihaeng Lee, Janghyeon Lee, Byungju Kim, Eojindl Yi, Junmo Kim</i>	
SEMI-SUPERVISED LEARNING FOR MULTI-TASK SCENE UNDERSTANDING BY NEURAL GRAPH CONSENSUS	1882
<i>Marius Leordeanu, Mihai Cristian Pîrvu, Dragos Costea, Alina E Marcu, Emil Slusanschi, Rahul Sukthankar</i>	
STATIC-DYNAMIC INTERACTION NETWORKS FOR OFFLINE SIGNATURE VERIFICATION	1893
<i>Huan Li, Ping Wei, Ping Hu</i>	
PROPOSAL-FREE VIDEO GROUNDING WITH CONTEXTUAL PYRAMID NETWORK	1902
<i>Kun Li, Dan Guo, Meng Wang</i>	

WRITE-A-SPEAKER: TEXT-BASED EMOTIONAL AND RHYTHMIC TALKING-HEAD GENERATION	1911
<i>Lincheng Li, Suzhen Wang, Zhimeng Zhang, Yu Ding, Yixing Zheng, Xin Yu, Changjie Fan</i>	
EXPLOITING LEARNABLE JOINT GROUPS FOR HAND POSE ESTIMATION	1921
<i>Moran Li, Yuan Gao, Nong Sang</i>	
RTS3D: REAL-TIME STEREO 3D DETECTION FROM 4D FEATURE-CONSISTENCY EMBEDDING SPACE FOR AUTONOMOUS DRIVING	1930
<i>Peixuan Li, Shun Su, Huaici Zhao</i>	
ADVERSARIAL POSE REGRESSION NETWORK FOR POSE-INVARIANT FACE RECOGNITIONS	1940
<i>Pengyu Li, Biao Wang, Lei Zhang</i>	
CATEGORY DICTIONARY GUIDED UNSUPERVISED DOMAIN ADAPTATION FOR OBJECT DETECTION	1949
<i>Shuai Li, Jianqiang Huang, Xian-Sheng Hua, Lei Zhang</i>	
JOINT SEMANTIC-GEOMETRIC LEARNING FOR POLYGONAL BUILDING SEGMENTATION	1958
<i>Weijia Li, Wenqian Zhao, Huaping Zhong, Conghui He, Dahua Lin</i>	
GENERALIZED ZERO-SHOT LEARNING VIA DISENTANGLED REPRESENTATION	1966
<i>Xiangyu Li, Zhe Xu, Kun Wei, Cheng Deng</i>	
LEARNING OMNI-FREQUENCY REGION-ADAPTIVE REPRESENTATIONS FOR REAL IMAGE SUPER-RESOLUTION	1975
<i>Xin Li, Xin Jin, Tao Yu, Simeng Sun, Yingxue Pang, Zhizheng Zhang, Zhibo Chen</i>	
GROUP-WISE SEMANTIC MINING FOR WEAKLY SUPERVISED SEMANTIC SEGMENTATION	1984
<i>Xueyi Li, Tianfei Zhou, Jianwu Li, Yi Zhou, Zhaoxiang Zhang</i>	
INFERENCE FUSION WITH ASSOCIATIVE SEMANTICS FOR UNSEEN OBJECT DETECTION	1993
<i>Yanan Li, Pengyang Li, Han Cui, Donghui Wang</i>	
DEEP UNSUPERVISED IMAGE HASHING BY MAXIMIZING BIT ENTROPY	2002
<i>Yunqiang Li, Jan Van Gemert</i>	
SEQUENTIAL END-TO-END NETWORK FOR EFFICIENT PERSON SEARCH	2011
<i>Zhengjia Li, Duoqian Miao</i>	
SD-POSE: SEMANTIC DECOMPOSITION FOR CROSS-DOMAIN 6D OBJECT POSE ESTIMATION	2020
<i>Zhigang Li, Yinlin Hu, Mathieu Salzmann, Xiangyang Ji</i>	
TEMPORAL PYRAMID NETWORK FOR PEDESTRIAN TRAJECTORY PREDICTION WITH MULTI-SUPERVISION	2029
<i>Rongqin Liang, Yuanman Li, Xia Li, Yi Tang, Jiantao Zhou, Wenbin Zou</i>	
QUERY-MEMORY RE-AGGREGATION FOR WEAKLY-SUPERVISED VIDEO OBJECT SEGMENTATION	2038
<i>Fanchao Lin, Hongtao Xie, Yan Li, Yongdong Zhang</i>	

AUGMENTED PARTIAL MUTUAL LEARNING WITH FRAME MASKING FOR VIDEO CAPTIONING	2047
<i>Ke Lin, Zhuoxin Gan, Liwei Wang</i>	
EXPLOITING AUDIO-VISUAL CONSISTENCY WITH PARTIAL SUPERVISION FOR SPATIAL AUDIO GENERATION	2056
<i>Yan-Bo Lin, Yu-Chiang Frank Wang</i>	
SINGLE VIEW POINT CLOUD GENERATION VIA UNIFIED 3D PROTOTYPE	2064
<i>Yu Lin, Yigong Wang, Yi-Fan Li, Zhuoyi Wang, Yang Gao, Latifur Khan</i>	
SELF-SUPERVISED SKETCH-TO-IMAGE SYNTHESIS	2073
<i>Bingchen Liu, Yizhe Zhu, Kunpeng Song, Ahmed Elgammal</i>	
TIME: TEXT AND IMAGE MUTUAL-TRANSLATION ADVERSARIAL NETWORKS	2082
<i>Bingchen Liu, Kunpeng Song, Yizhe Zhu, Gerard De Melo, Ahmed Elgammal</i>	
SA-BNN: STATE-AWARE BINARY NEURAL NETWORK	2091
<i>Chunlei Liu, Peng Chen, Bohan Zhuang, Chunhua Shen, Baochang Zhang, Wenrui Ding</i>	
SPATIOTEMPORAL GRAPH NEURAL NETWORK BASED MASK RECONSTRUCTION FOR VIDEO OBJECT SEGMENTATION	2100
<i>Daizong Liu, Shuangjie Xu, Xiao-Yang Liu, Zichuan Xu, Wei Wei, Pan Zhou</i>	
F2NET: LEARNING TO FOCUS ON THE FOREGROUND FOR UNSUPERVISED VIDEO OBJECT SEGMENTATION	2109
<i>Daizong Liu, Dongdong Yu, Changhu Wang, Pan Zhou</i>	
TOWARD REALISTIC VIRTUAL TRY-ON THROUGH LANDMARK GUIDED SHAPE MATCHING	2118
<i>Guoqiang Liu, Dan Song, Ruofeng Tong, Min Tang</i>	
LARGE MOTION VIDEO SUPER-RESOLUTION WITH DUAL SUBNET AND MULTI- STAGE COMMUNICATED UPSAMPLING	2127
<i>Hongying Liu, Peng Zhao, Zubo Ruan, Fanhua Shang, Yuanyuan Liu</i>	
FCFR-NET: FEATURE FUSION BASED COARSE-TO-FINE RESIDUAL LEARNING FOR DEPTH COMPLETION	2136
<i>Lina Liu, Xibin Song, Xiaoyang Lyu, Junwei Diao, Mengmeng Wang, Yong Liu, Liangjun Zhang</i>	
ACTIVITY IMAGE-TO-VIDEO RETRIEVAL BY DISENTANGLING APPEARANCE AND MOTION	2145
<i>Liu Liu, Jiangtong Li, Li Niu, Ruicong Xu, Liqing Zhang</i>	
ADAPTIVE PATTERN-PARAMETER MATCHING FOR ROBUST PEDESTRIAN DETECTION	2154
<i>Mengyin Liu, Chao Zhu, Jun Wang, Xu-Cheng Yin</i>	
TEMPORAL SEGMENTATION OF FINE-GAINED SEMANTIC ACTION: A MOTION- CENTERED FIGURE SKATING DATASET	2163
<i>Shenglan Liu, Aibin Zhang, Yunheng Li, Jian Zhou, Li Xu, Zhuben Dong, Renhao Zhang</i>	
LEARNING HYBRID RELATIONSHIPS FOR PERSON RE-IDENTIFICATION	2172
<i>Shuang Liu, Wenmin Huang, Zhong Zhang</i>	

TRANSLATE THE FACIAL REGIONS YOU LIKE USING SELF-ADAPTIVE REGION TRANSLATION	2180
<i>Wenshuang Liu, Wenting Chen, Zhanjia Yang, Linlin Shen</i>	
SUBTYPE-AWARE UNSUPERVISED DOMAIN ADAPTATION FOR MEDICAL DIAGNOSIS	2189
<i>Xiaofeng Liu, Xiongchang Liu, Bo Hu, Wenxuan Ji, Fangxu Xing, Jun Lu, Jane You, C.-C. Jay Kuo, Georges El Fakhri, Jonghye Woo</i>	
FONTRL: CHINESE FONT SYNTHESIS VIA DEEP REINFORCEMENT LEARNING	2198
<i>Yitian Liu, Zhouhui Lian</i>	
HIERARCHICAL INFORMATION PASSING BASED NOISE-TOLERANT HYBRID LEARNING FOR SEMI-SUPERVISED HUMAN PARSING	2207
<i>Yunan Liu, Shanshan Zhang, Jian Yang, Pongchi Yuen</i>	
DELVING INTO VARIANCE TRANSMISSION AND NORMALIZATION: SHIFT OF AVERAGE GRADIENT MAKES THE NETWORK COLLAPSE	2216
<i>Yuxiang Liu, Jidong Ge, Chuanyi Li, Jie Gui</i>	
AGGREGATED MULTI-GANS FOR CONTROLLED 3D HUMAN MOTION PREDICTION	2225
<i>Zhenguang Liu, Kedi Lyu, Shuang Wu, Haipeng Chen, Yanbin Hao, Shouling Ji</i>	
ACSNET: ACTION-CONTEXT SEPARATION NETWORK FOR WEAKLY SUPERVISED TEMPORAL ACTION LOCALIZATION	2233
<i>Ziyi Liu, Le Wang, Qilin Zhang, Wei Tang, Junsong Yuan, Nanning Zheng, Gang Hua</i>	
WEAKLY SUPERVISED TEMPORAL ACTION LOCALIZATION THROUGH LEARNING EXPLICIT SUBSPACES FOR ACTION AND CONTEXT	2242
<i>Ziyi Liu, Le Wang, Wei Tang, Junsong Yuan, Nanning Zheng, Gang Hua</i>	

PART 2

POINTNET: POINT CLOUD FRAME INTERPOLATION NETWORK	2251
<i>Fan Lu, Guang Chen, Sanqing Qu, Zhijun Li, Yinlong Liu, Alois Knoll</i>	
A GLOBAL OCCLUSION-AWARE APPROACH TO SELF-SUPERVISED MONOCULAR VISUAL ODOMETRY	2260
<i>Yao Lu, Xiaoli Xu, Mingyu Ding, Zhiwu Lu, Tao Xiang</i>	
PC-HMR: POSE CALIBRATION FOR 3D HUMAN MESH RECOVERY FROM 2D IMAGES/VIDEOS	2269
<i>Tianyu Luan, Yali Wang, Junhao Zhang, Zhe Wang, Zhipeng Zhou, Yu Qiao</i>	
DEEPT: LEARNING GEOMETRY FROM DELAUNAY TRIANGULATION FOR SURFACE RECONSTRUCTION	2277
<i>Yiming Luo, Zhenxing Mi, Wenbing Tao</i>	
DUAL-LEVEL COLLABORATIVE TRANSFORMER FOR IMAGE CAPTIONING	2286
<i>Yunpeng Luo, Jiayi Ji, Xiaoshuai Sun, Liujuan Cao, Yongjian Wu, Feiyue Huang, Chia-Wen Lin, Rongrong Ji</i>	
HR-DEPTH: HIGH RESOLUTION SELF-SUPERVISED MONOCULAR DEPTH ESTIMATION	2294
<i>Xiaoyang Lyu, Liang Liu, Mengmeng Wang, Xin Kong, Lina Liu, Yong Liu, Xinxin Chen, Yi Yuan</i>	

SMIL: MULTIMODAL LEARNING WITH SEVERELY MISSING MODALITY	2302
<i>Mengmeng Ma, Jian Ren, Long Zhao, Sergey Tulyakov, Cathy Wu, Xi Peng</i>	
PYRAMIDAL FEATURE SHRINKING FOR SALIENT OBJECT DETECTION	2311
<i>Mingcan Ma, Changqun Xia, Jia Li</i>	
LEARNING TO COUNT VIA UNBALANCED OPTIMAL TRANSPORT	2319
<i>Zhiheng Ma, Xing Wei, Xiaopeng Hong, Hui Lin, Yunfeng Qiu, Yihong Gong</i>	
SCENE GRAPH EMBEDDINGS USING RELATIVE SIMILARITY SUPERVISION	2328
<i>Paridhi Maheshwari, Ritwick Chaudhry, Vishwa Vinay</i>	
FEW-SHOT LIFELONG LEARNING	2337
<i>Pratik Mazumder, Pravendra Singh, Piyush Rai</i>	
CARPE POSTERUM: A CONVOLUTIONAL APPROACH FOR REAL-TIME PEDESTRIAN PATH PREDICTION	2346
<i>Matias Mendieta, Hamed Tabkhi</i>	
DYNAMIC ANCHOR LEARNING FOR ARBITRARY-ORIENTED OBJECT DETECTION	2355
<i>Qi Ming, Zhiqiang Zhou, Lingjuan Miao, Hongwei Zhang, Linhao Li</i>	
TERRACE-BASED FOOD COUNTING AND SEGMENTATION	2364
<i>Huu-Thanh Nguyen, Chong-Wah Ngo</i>	
EMBODIED VISUAL ACTIVE LEARNING FOR SEMANTIC SEGMENTATION	2373
<i>David Nilsson, Aleksis Pirinen, Erik Gärtner, Cristian Sminchisescu</i>	
TDAF: TOP-DOWN ATTENTION FRAMEWORK FOR VISION TASKS	2384
<i>Bo Pang, Yizhuo Li, Jiefeng Li, Muchen Li, Hanwen Cao, Cewu Lu</i>	
FEW-SHOT FONT GENERATION WITH LOCALIZED STYLE REPRESENTATIONS AND FACTORIZATION	2393
<i>Song Park, Sanghyuk Chun, Junbum Cha, Bado Lee, Hyunjung Shim</i>	
LEARNING DISENTANGLED REPRESENTATION FOR FAIR FACIAL ATTRIBUTE CLASSIFICATION VIA FAIRNESS-AWARE INFORMATION ALIGNMENT	2403
<i>Sungho Park, Sunhee Hwang, Dohyung Kim, Hyeran Byun</i>	
VID-ODE: CONTINUOUS-TIME VIDEO GENERATION WITH NEURAL ORDINARY DIFFERENTIAL EQUATION	2412
<i>Sunghyun Park, Kangyeol Kim, Junsoo Lee, Jaegul Choo, Joonseok Lee, Sookyung Kim, Edward Choi</i>	
CHEF: CROSS-MODAL HIERARCHICAL EMBEDDINGS FOR FOOD DOMAIN RETRIEVAL	2423
<i>Hai X. Pham, Ricardo Guerrero, Vladimir Pavlovic, Jiatong Li</i>	
EXPLAINABLE MODELS WITH CONSISTENT INTERPRETATIONS	2431
<i>Vipin Pillai, Hamed Pirsiavash</i>	
DUAL ADVERSARIAL GRAPH NEURAL NETWORKS FOR MULTI-LABEL CROSS- MODAL RETRIEVAL	2440
<i>Shengsheng Qian, Dizhan Xue, Huaiwen Zhang, Quan Fang, Changsheng Xu</i>	
KGDET: KEYPOINT-GUIDED FASHION DETECTION	2449
<i>Shenhan Qian, Dongze Lian, Binqiang Zhao, Tong Liu, Bohui Zhu, Hai Li, Shenghua Gao</i>	

LEARNING MODULATED LOSS FOR ROTATED OBJECT DETECTION	2458
<i>Wen Qian, Xue Yang, Silong Peng, Junchi Yan, Yue Guo</i>	
MANGO: A MASK ATTENTION GUIDED ONE-STAGE SCENE TEXT SPOTTER	2467
<i>Liang Qiao, Ying Chen, Zhanzhan Cheng, Yunlu Xu, Yi Niu, Shiliang Pu, Fei Wu</i>	
REFINE: PREDICTION FUSION NETWORK FOR PANOPTIC SEGMENTATION	2477
<i>Jiawei Ren, Cunjun Yu, Zhongang Cai, Mingyuan Zhang, Chongsong Chen, Haiyu Zhao, Shuai Yi, Hongsheng Li</i>	
AUTOLR: LAYER-WISE PRUNING AND AUTO-TUNING OF LEARNING RATES IN FINE-TUNING OF DEEP NETWORKS	2486
<i>Youngmin Ro, Jin Young Choi</i>	
DPFPS: DYNAMIC AND PROGRESSIVE FILTER PRUNING FOR COMPRESSING CONVOLUTIONAL NEURAL NETWORKS FROM SCRATCH	2495
<i>Xiaofeng Ruan, Yufan Liu, Bing Li, Chunfeng Yuan, Weiming Hu</i>	
EFFICIENT CERTIFICATION OF SPATIAL ROBUSTNESS	2504
<i>Anian Ruoss, Maximilian Baader, Mislav Balunovic, Martin Vechev</i>	
SEMANTIC GROUPING NETWORK FOR VIDEO CAPTIONING	2514
<i>Hobin Ryu, Sunghun Kang, Haeyong Kang, Chang D. Yoo</i>	
AUDIO-VISUAL LOCALIZATION BY SYNTHETIC ACOUSTIC IMAGE GENERATION	2523
<i>Valentina Sanguineti, Pietro Morerio, Alessio Del Bue, Vittorio Murino</i>	
ENHANCED REGULARIZERS FOR ATTRIBUTIONAL ROBUSTNESS	2532
<i>Anindya Sarkar, Anirban Sarkar, Vineeth N Balasubramanian</i>	
PROGRESSIVE NETWORK GRAFTING FOR FEW-SHOT KNOWLEDGE DISTILLATION	2541
<i>Chengchao Shen, Xinchao Wang, Youtan Yin, Jie Song, Sihui Luo, Mingli Song</i>	
SOCIAL-DPF: SOCIALLY ACCEPTABLE DISTRIBUTION PREDICTION OF FUTURES	2550
<i>Xiaodan Shi, Xiaowei Shao, Guangming Wu, Haoran Zhang, Zhiling Guo, Renhe Jiang, Ryosuke Shibasaki</i>	
ROBUST KNOWLEDGE TRANSFER VIA HYBRID FORWARD ON THE TEACHER-STUDENT MODEL	2558
<i>Liangchen Song, Jialian Wu, Ming Yang, Qian Zhang, Yuan Li, Junsong Yuan</i>	
ATTANET: ATTENTION-AUGMENTED NETWORK FOR FAST AND ACCURATE SCENE PARSING	2567
<i>Qi Song, Kangfu Mei, Rui Huang</i>	
TO CHOOSE OR TO FUSE? SCALE SELECTION FOR CROWD COUNTING	2576
<i>Qingyu Song, Changan Wang, Yabiao Wang, Ying Tai, Chengjie Wang, Jilin Li, Jian Wu, Jiayi Ma</i>	
IMAGE CAPTIONING WITH CONTEXT-AWARE AUXILIARY GUIDANCE	2584
<i>Zeliang Song, Xiaofei Zhou, Zhendong Mao, Jianlong Tan</i>	
UNSUPERVISED MODEL ADAPTATION FOR CONTINUAL SEMANTIC SEGMENTATION	2593
<i>Serban Stan, Mohammad Rostami</i>	

BSN++: COMPLEMENTARY BOUNDARY REGRESSOR WITH SCALE-BALANCED RELATION MODELING FOR TEMPORAL ACTION PROPOSAL GENERATION	2602
<i>Haisheng Su, Weihao Gan, Wei Wu, Yu Qiao, Junjie Yan</i>	
MANGAGAN: UNPAIRED PHOTO-TO-MANGA TRANSLATION BASED ON THE METHODOLOGY OF MANGA DRAWING	2611
<i>Hao Su, Jianwei Niu, Xuefeng Liu, Qingfeng Li, Jiahe Cui, Ji Wan</i>	
MAMBA: MULTI-LEVEL AGGREGATION VIA MEMORY BANK FOR VIDEO OBJECT DETECTION	2620
<i>Guanxiong Sun, Yang Hua, Guosheng Hu, Neil Robertson</i>	
DEEP PROBABILISTIC IMAGING: UNCERTAINTY QUANTIFICATION AND MULTI- MODAL SOLUTION CHARACTERIZATION FOR COMPUTATIONAL IMAGING	2628
<i>He Sun, Katherine L. Bouman</i>	
DOMAIN GENERAL FACE FORGERY DETECTION BY LEARNING TO WEIGHT	2638
<i>Ke Sun, Hong Liu, Qixiang Ye, Yue Gao, Jianzhuang Liu, Ling Shao, Rongrong Ji</i>	
OBJECT-CENTRIC IMAGE GENERATION FROM LAYOUTS	2647
<i>Tristan Sylvain, Pengchuan Zhang, Yoshua Bengio, R Devon Hjelm, Shikhar Sharma</i>	
STRUCTURE-AWARE PERSON IMAGE GENERATION WITH POSE DECOMPOSITION AND SEMANTIC CORRELATION	2656
<i>Jilin Tang, Yi Yuan, Tianjia Shao, Yong Liu, Mengmeng Wang, Kun Zhou</i>	
GRADIENT REGULARIZED CONTRASTIVE LEARNING FOR CONTINUAL DOMAIN ADAPTATION	2665
<i>Shixiang Tang, Peng Su, Dapeng Chen, Wanli Ouyang</i>	
ADVERSARIAL TRAINING REDUCES INFORMATION AND IMPROVES TRANSFERABILITY	2674
<i>Matteo Terzi, Alessandro Achille, Marco Maggipinto, Gian Antonio Susto</i>	
ADVERSARIAL TURING PATTERNS FROM CELLULAR AUTOMATA	2683
<i>Nurislam Tursynbek, Ilya Vilkoviskiy, Maria Sindeeva, Ivan Oseledets</i>	
ARTIFICIAL DUMMIES FOR URBAN DATASET AUGMENTATION	2692
<i>Antonín Vobecký, David Hurych, Michal Uricár, Patrick Pérez, Josef Sivic</i>	
SCNET: TRAINING INFERENCE SAMPLE CONSISTENCY FOR INSTANCE SEGMENTATION	2701
<i>Thang Vu, Haeyong Kang, Chang D. Yoo</i>	
TASK-INDEPENDENT KNOWLEDGE MAKES FOR TRANSFERABLE REPRESENTATIONS FOR GENERALIZED ZERO-SHOT LEARNING	2710
<i>Chaoqun Wang, Xuejin Chen, Shaobo Min, Xiaoyan Sun, Houqiang Li</i>	

Author Index