



CVPR 2022: Accepted papers from Cyber Valley partner institutions

1. [Non-Isotropy Regularization for Proxy-Based Deep Metric Learning](#)
Karsten Roth (University of Tübingen); Oriol Vinyals (DeepMind); Zeynep Akata (University of Tübingen)
2. [Integrating Language Guidance Into Vision-Based Deep Metric Learning](#)
Karsten Roth (University of Tübingen); Oriol Vinyals (DeepMind); Zeynep Akata (University of Tübingen)
3. [Large Loss Matters in Weakly Supervised Multi-Label Classification](#)
YoungWook Kim (Seoul National University); Jae Myung Kim (University of Tübingen); Zeynep Akata (University of Tübingen); Jungwoo Lee (Seoul National University)
4. [Audio-Visual Generalised Zero-Shot Learning With Cross-Modal Attention and Language](#)
Otniel-Bogdan Mercea (University of Tübingen); Lukas Riesch (University of Tübingen); A. Sophia Koepke (University of Tübingen); Zeynep Akata (University of Tübingen)
5. [KG-SP: Knowledge Guided Simple Primitives for Open World Compositional Zero-Shot Learning](#)
Shyamgopal Karthik (University of Tübingen); Massimiliano Mancini (University of Tübingen); Zeynep Akata (University of Tübingen)
6. [VGSE: Visually-Grounded Semantic Embeddings for Zero-Shot Learning](#)
Wenjia Xu (Institute of Electronics, Chinese Academy of Sciences); Yongqin Xian (ETH Zürich); Jiuniu Wang (City University of Hong Kong); Bernt Schiele (Max Planck Institute for Informatics); Zeynep Akata (University of Tübingen)
7. [OSSO: Obtaining Skeletal Shape From Outside](#)
Marilyn Keller (Max Planck Institute for Intelligent Systems); Silvia Zuffi (IMATI-CNR); Michael J. Black (Max Planck Institute for Intelligent Systems); Sergi Pujades (Université Grenoble Alpes)
8. [gDNA: Towards Generative Detailed Neural Avatars](#)
Xu Chen (ETH Zürich); Tianjian Jiang (ETH Zürich); Jie Song (ETH Zürich); Jinlong Yang (Max Planck Institute for Intelligent Systems); Michael J. Black (Max Planck Institute for Intelligent Systems); Andreas Geiger (University of Tübingen); Otmar Hilliges (ETH Zürich)
9. [EMOCA: Emotion Driven Monocular Face Capture and Animation](#)
Radek Daněček (Max Planck Institute for Intelligent Systems); Michael J. Black (Max Planck Institute for Intelligent Systems); Timo Bolkart (Max Planck Institute for Intelligent Systems)

10. [**IM Avatar: Implicit Morphable Head Avatars From Videos**](#)
 Yufeng Zheng (ETH Zürich); Victoria Fernandez Abrevaya (Max Planck Institute for Intelligent Systems); Xu Chen (ETH Zürich); Marcel C. Bühler (ETH Zürich); Michael J. Black (Max Planck Institute for Intelligent Systems); Otmar Hilliges (ETH Zürich)
11. [**ICON: Implicit Clothed Humans Obtained From Normals**](#)
 Yuliang Xiu (Max Planck Institute for Intelligent Systems); Jinlong Yang (Max Planck Institute for Intelligent Systems); Dimitrios Tzionas (Max Planck Institute for Intelligent Systems); Michael J. Black (Max Planck Institute for Intelligent Systems)
12. [**Capturing and Inferring Dense Full-Body Human-Scene Contact**](#)
 Chun-Hao Paul Huang (Max Planck Institute for Intelligent Systems); Hongwei Yi (Max Planck Institute for Intelligent Systems); Markus Höschle (Max Planck Institute for Intelligent Systems); Matvey Safroshkin (Max Planck Institute for Intelligent Systems); Tsvetelina Alexiadis (Max-Planck Institute for Intelligent Systems); Senya Polikovsky (Max Planck Institute for Intelligent Systems); Daniel Scharstein (Middlebury College); Michael J. Black (Max Planck Institute for Intelligent Systems)
13. [**GOAL: Generating 4D Whole-Body Motion for Hand-Object Grasping**](#)
 Omid Taheri (Max Planck Institute for Intelligent Systems); Vasileios Choutas (ETH Zürich); Michael J. Black (Max Planck Institute for Intelligent Systems); Dimitrios Tzionas (Max Planck Institute for Intelligent Systems)
14. [**Putting People in Their Place: Monocular Regression of 3D People in Depth**](#)
 Yu Sun (Harbin Institute of technology); Wu Liu (AI Research of JD.com); Qian Bao (AI Research of JD.com); Yili Prof. Fu (HIT); Tao Mei (AI Research of JD.com); Michael J. Black (Max Planck Institute for Intelligent Systems)
15. [**Human-Aware Object Placement for Visual Environment Reconstruction**](#)
 Hongwei Yi (Max Planck Institute for Intelligent Systems)*; Chun-Hao Paul Huang (Max Planck Institute for Intelligent Systems); Dimitrios Tzionas (Max Planck Institute for Intelligent Systems); Justus Thies (Max Planck Institute for Intelligent Systems); Muhammed Kocabas (Max Planck Institute for Intelligent Systems/ETH Zürich); Mohamed Hassan (Max Planck Institute for Intelligent Systems); Siyu Tang (ETH Zürich); Michael J. Black (Max Planck Institute for Intelligent Systems)
16. [**BARC: Learning To Regress 3D Dog Shape From Images by Exploiting Breed Information**](#)
 Nadine Rüegg (ETH Zürich/Max-Planck Institute for Intelligent Systems); Silvia Zuffi (IMATI-CNR); Konrad Schindler (ETH Zürich); Michael J. Black (Max Planck Institute for Intelligent Systems)
17. [**Accurate 3D Body Shape Regression Using Metric and Semantic Attributes**](#)
 Vasileios Choutas (ETH Zürich); Lea Müller (Max Planck Institute for Intelligent Systems); Chun-Hao Paul Huang (Max Planck Institute for Intelligent Systems); Siyu Tang (ETH Zürich); Dimitrios Tzionas (Max Planck Institute for Intelligent Systems); Michael J. Black (Max Planck Institute for Intelligent Systems)
18. [**RegNeRF: Regularizing Neural Radiance Fields for View Synthesis From Sparse Inputs**](#)
 Michael Niemeyer (Max Planck Institute for Intelligent Systems/University of Tübingen)*; Jonathan T Barron (Google Research); Ben Mildenhall (Google Research); Mehdi S. M. Sajjadi (Google Brain); Andreas Geiger (University of Tübingen); Noha Radwan (Google)

19. [**PINA: Learning a Personalized Implicit Neural Avatar From a Single RGB-D Video Sequence**](#)
Zijian Dong (ETH Zürich); Chen Guo (ETH Zürich); Jie Song (ETH Zürich); Xu Chen (ETH Zürich); Andreas Geiger (University of Tübingen); Otmar Hilliges (ETH Zürich)
20. [**BEHAVE: Dataset and Method for Tracking Human Object Interactions**](#)
Bharat Lal Bhatnagar (University of Tübingen/ Max Planck Institute for Informatics); Xianghui Xie (Saarland University); Ilya A. Petrov (University of Tübingen); Cristian Sminchisescu (Google); Christian Theobalt (Max Planck Institute for Informatics); Gerard Pons-Moll (University of Tübingen)
21. [**Towards Principled Disentanglement for Domain Generalization**](#)
Hanlin Zhang (Carnegie Mellon University); Yi-Fan Zhang (NLPR, China); Weiyang Liu (University of Cambridge); Adrian Weller (University of Cambridge); Bernhard Schölkopf (Max Planck Institute for Intelligent Systems); Eric Xing (MBZUAI, CMU, and Petuum Inc.)
22. [**Leveling Down in Computer Vision: Pareto Inefficiencies in Fair Deep Classifiers**](#)
Dominik Zietlow (Max Planck Institute for Intelligent Systems); Michael Lohaus (University of Tübingen); Guha Balakrishnan (Amazon Web Services); Matthäus Kleindessner (Amazon); Francesco Locatello (Amazon Lablet); Bernhard Schölkopf (Amazon/Max Planck Institute for Intelligent Systems); Chris Russell (Amazon)
23. [**Towards Total Recall in Industrial Anomaly Detection**](#)
Karsten Roth (University of Tübingen); Latha Pemula (Amazon); Joaquin Zepeda (Amazon); Bernhard Schölkopf (Amazon/Max Planck Institute for Intelligent Systems); Thomas Brox (University of Freiburg); Peter Gehler (Amazon)
24. [**Weakly Supervised Semantic Segmentation Using Out-of-Distribution Data**](#)
Jungbeom Lee (Seoul National University); Seong Joon Oh (University of Tübingen/NAVER AI Lab); Sangdoon Yun (NAVER AI LAB); Junsuk Choe (Sogang University); Eunji Kim (Seoul National University); Sungroh Yoon (Seoul National University)
25. [**What Matters For Meta-Learning Vision Regression Tasks?**](#)
Ning Gao (Bosch Center for Artificial Intelligence); Hanna Ziesche (Bosch Center for Artificial Intelligence); Vien A Ngo (Bosch Center for Artificial Intelligence); Michael Volpp (Karlsruhe Institute of Technology); Gerhard Neumann (Karlsruhe Institute of Technology)
26. [**Give Me Your Attention: Dot-Product Attention Considered Harmful for Adversarial Patch Robustness**](#)
Giulio Lovisotto (University of Oxford); Nicole Finnie (Bosch Center for Artificial Intelligence); Mauricio Munoz (Bosch Center for Artificial Intelligence); Chaithanya Kumar Mummadi (Bosch Center for Artificial Intelligence); Jan Hendrik Metzen (Bosch Center for Artificial Intelligence)
27. [**Occluded Human Mesh Recovery**](#)
Rawal Khirodkar (Carnegie Mellon University); Shashank Tripathi (Max Planck Institute for Intelligent Systems); Kris Kitani (Carnegie Mellon University)
28. [**D-Grasp: Physically Plausible Dynamic Grasp Synthesis for Hand-Object Interactions**](#)
Sammy Christen (ETH Zürich); Muhammed Kocabas (Max Planck Institute for Intelligent Systems/ETH Zürich); Emre Aksan (ETH Zürich); Jemin Hwangbo (KAIST); Jie Song (ETH Zürich); Otmar Hilliges (ETH Zürich)

29. [3D-VField: Learning to Adversarially Deform Point Clouds for Robust 3D Object Detection](#)

Alexander Lehner (TU München/BMW Group); Stefano Gasperini (TU München/BMW Group); Alvaro Marcos-Ramiro (BMW Group); Mohammad-Ali Nikouei Mahani (BMW Group); Michael Schmidt (BMW Group); Nassir Navab (TU München); Benjamin Busam (TU München); Federico Tombari (Google/TU München)