ANDREAS GEIGER

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EMPLOYMENT

University of Tübingen, Germany Full Professor, Department of Computer Science, Autonomou	from March 2018 - now s Vision Group
MPI for Intelligent Systems, Tübingen, Germany Independent Max-Planck Research Group Leader, Autonomou	from June 2016 - February 2018 us Vision Group
ETH Zürich, Switzerland <i>f</i> Visiting Professor, Computer Vision and Geometry Group (in	from September 2016 - February 2018 aterim for Marc Pollefeys)
MPI for Intelligent Systems, Tübingen, Germany Research Scientist & Group Leader, Perceiving Systems Depa	<i>June 2013 - May 2016</i> rtment
Karlsruhe Institute of Technology, Germany Research and Teaching Assistant, Department of Measuremen	September 2008 - May 2013 at and Control Systems
EDUCATION	
Karlsruhe Institute of Technology, Germany Ph.D. in Computer Vision, Department of Measurement and Ph.D. Thesis: Probabilistic Models for 3D Urban Scene Unde Advisors: Christoph Stiller, Raquel Urtasun Grade: 1.0/1.0 (awarded with distinction)	5
Massachusetts Institute of Technology, USA Master Thesis: Human Body Tracking with Rank Priors for N Advisors: Trevor Darrell, Raquel Urtasun, Rainer Stiefelhager Grade: 1.0/1.0	
Ecole Polytechnique Fédérale de Lausanne, Switzerlan Bachelor Thesis: Automatic Multiple Camera Calibration Advisors: Pascal Fua, Vincent Lepetit Grade: 1.0/1.0	nd February 2006
Karlsruhe Institute of Technology, Germany Department of Computer Science and Mathematics Computer Science: Diploma Grade: 1.0/1.0 (awarded with distinction, ranked #4/247)	October 2003 - July 2008
INTERNATIONAL AND RESEARCH EXPERIENCE	
Visiting ResearcherJuTTI Chicago (with Raquel Urtasun)	ne - July 2010, July 2011, June 2012
Visiting Researcher ETH Zürich (with Marc Pollefeys)	March - May 2010
Research Assistant Karlsruhe Institute of Technology (with Christoph Stiller)	September 2008 - February 2013
Visiting Student Massachusetts Institute of Technology (with Trevor Darrell)	February - July 2008
Visiting Student Ecole Polytechnique Fédérale de Lausanne (with Pascal Fua a	September 2005 - February 2006 and Vincent Lepetit)

TEACHING EXPERIENCE

University of Tübingen: Computer Vision Lecturer (150 students)	April 2021 - July 2021
University of Tübingen: Deep Learning Lecturer (250 students)	November 2020 - March 2021
University of Tübingen: ML in Graphics and Vision Lecturer (50 students)	April 2020 - July 2020
University of Tübingen: Self-driving Cars Lecturer (80 students)	October 2019 - February 2020
University of Tübingen: ML in Graphics and Vision Lecturer (50 students)	April 2019 - July 2019
University of Tübingen: Self-driving Cars Lecturer (50 students)	October 2018 - February 2019
University of Tübingen: ML in Graphics and Vision Lecturer (40 students)	April 2018 - July 2018
ETH Zürich: Computer Vision Lecturer (170 students)	September 2017 - December 2017
ETH Zürich: 3D Vision Lecturer (50 students)	February 2017 - June 2017
ETH Zürich: Computer Vision Lecturer (120 students)	September 2016 - December 2016
University of Tübingen: Graphical Models in Computer Lecturer (30 students)	Vision April 2016 - July 2016
University of Tübingen: Graphical Models in Computer Lecturer (30 students)	Vision Oct. 2014 - March 2015
KIT: Measurement and Control Systems Interim Lecturer and Teaching Assistant (600 students)	April 2009 - March 2010
KIT: Measurement Systems: Practical Courses Teaching Assistant (groups of 6 students)	September 2008 - March 2010
STUDENT SUPERVISION	
Katrin Renz, Ph.D. Student Few-shot learning for Self-Driving	May 2021 - now
Joo Ho Lee, PostDoc Learning Physically Accurate Room-Scale Reconstructions	August 2020 - now
Axel Sauer, Ph.D. Student Learning Causal Representations for Self-Driving	April 2020 - now
Christian Reiser, Ph.D. Student Meta Learning for 3D Geometry and Material Estimation	April 2020 - now
Fabio Tosi, Ph.D. Intern (University of Bologna) Efficient, Accurate and High-Resolution Stereo Matching	April 2020 - November 2020
Kashyap Chitta, Ph.D. Student Interpretable Representations for End-to-End Self-Driving	September 2019 - now
Songyou Peng, Ph.D. Student (ETH Zürich) Implicit Representations for 3D Reconstruction	September 2019 - now

Xu Chen, Ph.D. Student (ETH Zürich) Photorealistic Human Representations	May 2019 - now
Katja Schwarz, Ph.D. Student 3D Controllable Image Synthesis	July 2019 - now
Michael Niemeyer, Ph.D. Student Continuous Representations for Shape and Motion	October 2018 - now
Michael Oechsle, Ph.D. Student (ETAS) Deep Generative Texture Synthesis	November 2017 - now
Carolin Schmitt, P1h.D. Student Learning Models for inferring Geometry, Materials and Light from	July 2017 - now RGB-D Videos
Despoina Paschalidou, Ph.D. Student Learning Deep Models with Primitive-Based Representations	April 2017 - now
Yiyi Liao, Ph.D. Intern Deep Layered Models for Semantic 3D to 2D Label Transfer in Dy	October 2016 - now vnamic Urban Scenes
Aseem Behl, Ph.D. Student Deep Semantic Scene Flow	August 2016 - August 2020
Benjamin Coors, Ph.D. Student (Robert Bosch GmbH) Invariances in Deep Learning	September 2016 - August 2019
Lars Mescheder, Ph.D. Student Accurate Reconstruction of Lights, Materials and 3D Geometry from	August 2016 - January 2020 om RGB, Depth and Motion
Gernot Riegler, Ph.D. Intern (TU Graz) Deep Models for 3D Classification, Pose Estimation, Segmentation	July 2016 - December 2016 and Reconstruction
Joël Janai, Ph.D. Student Learning Optical Flow from Slow Motion Videos	July 2015 - December 2019
Fatma Güney, Ph.D. Student Semantic 3D Scene Understanding from Videos	August 2013 - October 2017
Jun Xie, Ph.D. Intern (University of Washington) Large-scale Instance-Level Semantic Annotation	June 2014 - December 2014
Chen Zhou, Ph.D. Intern (Peking University) 3D Reconstruction from Fisheye Video Sequences	May 2014 - November 2014
Moritz Menze, Ph.D. Intern (University of Hannover) 3D Scene Flow Estimation	March 2014 - August 2014
AWARDS AND SCHOLARSHIPS	
CVPR Best Student Paper Award IEEE / CVF Computer Vision and Pattern Recognition Conference	June 2024 ce (CVPR), Seattle
10-Year Impact Award Sage Publications Ltd	June 2024
3DV Best Paper Award, Honorable Mention International Conference on 3D Vision, Davos, Switzerland	March 2024
nuPlan Challenge Winner International Conference on Computer Vision and Pattern Recogn	June 2023 ition, Vancouver
Longuet-Higgins Prize	June 2022

Longuet-Higgins Prize Jun IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR), New Orleans

Mark Everingham Prize International Conference on Computer Vision, Virtual	October 2021
Facebook Research Award Facebook Reality Labs	October 2021
Teaching Award for Lecture "Computer Vision" Department of Computer Science, University of Tübingen	July 2021
CVPR Best Paper Award IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR),	June 2021 Virtual
AI2000 - 100 Most Influential Scholars in Computer Vision Tsinghua AMiner	April 2020+2021
Junge Elite - Top 40 unter 40 Capital Business Journal, Gruner + Jahr, Germany	September 2019
ERC Starting Grant European Research Council (ERC)	August 2019
CVPR Best Paper Finalist (2 Papers) International Conference on Computer Vision and Pattern Recognition, Long	June 2019 Beach, USA
IEEE PAMI Young Researcher Award International Conference on Computer Vision and Pattern Recognition, Salt L	June 2018 ake City, USA
Outstanding Reviewer Award Neural Information and Processing Systems, Long Beach, USA	December 2017
3DV Best Student Paper Award International Conference on 3D Vision, Qingdao, China	October 2017
German Pattern Recognition Prize German Conference on Pattern Recognition, Basel, Switzerland	September 2017
Heinz Maier-Leibnitz Prize Deutsche Forschungsgemeinschaft (DFG)	May 2017
Outstanding Reviewer Award International Conference on Computer Vision and Pattern Recognition, Las Ve	June 2016 egas, USA
3DV Best Paper Award International Conference on 3D Vision, Lyon, France	October 2015
GCPR Best Paper Award German Conference on Pattern Recognition, Aachen, Germany	October 2015
Associate Member of the Max Planck ETH Center for Learning Sys MPI for Intelligent Systems in Tübingen and ETH Zürich	tems 2015-2016
Elected Ombudsperson at the Intelligent Systems Institute Tübingen Max Planck Institute for Intelligent Systems, Tübingen, Germany	n 2015-2018
KIT Doctoral Award (Best Ph.D. Thesis) Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany	February 2015
Ernst-Schoemperlen Prize (Research in Mobility Systems) Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany	November 2014
CVPR Best Paper Runner Up Award International Conference on Computer Vision and Pattern Recognition, Portla	June 2013 nd, USA
1st place in the GCDC competition with Team AnnieWAY Grand Cooperative Driving Challenge (GCDC), Helmond, Netherlands	May 2011

IV Best Dissertation Proposal Award Intelligent Vehicles Symposium, San Diego, USA	June 2010
DAAD and MIT scholarships Massachusetts Institute of Technology	February - July 2008
ERASMUS scholarship Ecole Polytechnique Fédérale de Lausanne	September 2005 - February 2006
Award of the German Physical Association Ferry Porsche Award	June 2002 June 2002

INVITED TALKS AND KEYNOTES

Naver Labs Workshop: Virtual invited talk	25.11.2021
Qualcomm-UvA Deep Vision Seminar: Virtual invited talk	06.10.2021
KAIST Seminar: Virtual invited talk	27.09.2021
Korean Conference on Computer Vision: Keynote talk	09.08.2021
Toyota Research Institute Seminar: Virtual invited talk	21.07.2021
3D Geometry and Vision Seminar: Virtual invited talk	21.04.2021
Stanford SCIEN Seminar: Virtual invited talk	14.04.2021
AIDA AI Excellence Series: Virtual invited talk	21.03.2021
UC San Diego Vision Seminar: Virtual invited talk	15.01.2021
WACV Workshop on Autonomous Driving: Virtual invited talk	09.01.2021
IJCAI Workshop on 3D Vision: Virtual invited talk	08.01.2021
University of Hong Kong Seminar: Virtual invited talk	07.01.2021
Carnegie Mellon University VASC Seminar: Virtual invited talk	31.08.2020
ECCV Workshops: 3 invited keynote talks (virtual)	08.2020
CVPR Workshops: 8 invited keynote talks (virtual)	06.2020
Oxford Vision Group Seminar: Oxford, UK	27.04.2020
International Computer Vision Summer School: Sicily, Italy	07.07.2019
Amazon: Seattle, USA	18.06.2019
CVPR Workshop on Uncertainty and Robustness: Long Beach, USA	17.06.2019
CVPR Workshop on Autonomous Driving: Long Beach, USA	17.06.2019
CVPR Robotic Vision Workshop: Long Beach, USA	17.06.2019
CVPR CARLA Workshop: Long Beach, USA	16.06.2019
Autonomous University of Barcelona: Barcelona, Spain	21.05.2019
Chalmers AI Research Center Inauguration: Gothenburg, Sweden	05.03.2019
International Max Planck Research School: Tübingen, Germany	31.01.2019
ETH Zürich, Institute of Neuroinformatics: Zürich, Switzerland	25.10.2018
ETH Zürich, Institute of Neuroinformatics: Zürich, Switzerland	25.10.2018
Continental Round Table: Lindau, Germany	20.09.2018
ECCV Vision-based Navigation for Autonomous Driving: Munich, Germany	09.09.2018
ECCV Joint COCO and Mapillary Workshop: Munich, Germany	09.09.2018
ECCV Workshop on Autonomous Navigation: Munich, Germany	08.09.2018
Intel Network on Intelligent Systems: Munich, Germany	05.09.2018
Bosch Center for Artificial Intelligence: Renning, Germany	24.07.2018
IMPRS Summer School: Bad Überkingen, Germany	22.06.2018
CVPR Workshop on Visual Odometry: Salt Lake City, USA	22.06.2018
CVPR Workshop on Vision with Biased or Scarce Data: Salt Lake City, USA	
CVPR Workshop on Robotic Vision: Salt Lake City, USA	22.06.2018
CVPR Workshop on Autonomous Driving: Salt Lake City, USA	18.06.2018
CVPR Robust Vision Challenge: Salt Lake City, USA	18.06.2018
Baidu ApolloScape Workshop: Beijing, China	23.04.2018
DALI Workshop on Autonomous Driving: Lanzarote, Spain	03.04.2018
IST Austria: Klosterneuburg, Austria	30.11.2017
TU Graz: Graz, Austria	24.11.2017
ICCV Workshop on Learning to See from 3D Data: Venice, Italy	28.10.2017
Teet workshop on Learning to bee from of Data. Venee, hay	20.10.2011

ICCV Workshop on Dynamic Scene Understanding: Venice, Italy	23.10.2017
Bosch Chassis Control Systems: Leonberg, Germany	23.10.2017 19.10.2017
NVIDIA GTC Europe: Munich, Germany	19.10.2017 12.10.2017
Microsoft Research Cambridge: Cambridge, England	26.09.2017
GCPR Award Lecture: Basel, Switzerland	20.09.2017 12.09.2017
BMVC Tutorial Lecture: London, England	04.09.2017
Intel NIS Network: Munich, Germany	30.08.2017
Disney Research Zürich: Zürich, Switzerland	25.09.2017
Summer School on Cooperative Interacting Automobiles: SchwäbGmünd	25.09.2017 09.08.2017
CVPR Workshop on Autonomous Driving: Honolulu, Hawaii, USA	20.07.2017
Summer School on Learning Systems: ETH Zürich, Switzerland	20.07.2017 06.07.2017
Robert Bosch GmbH: Bosch CC Leadership Meeting, Budapest, Hungary	10.05.2017
TU München: Computer Vision Group	31.03.2017
University of Maryland: CVPR Area Chair Workshop	27.02.2017
Princeton University: Computer Graphics and Vision Lab	24.02.2017
National University of Singapore: Singapore	24.02.2017 25.11.2016
ETH Zürich: Faculty Lunch Seminar	25.11.2010 24.10.2016
ECCV Workshop on Multi-target Tracking: Amsterdam, Netherlands	24.10.2010 09.10.2016
ECCV Workshop on Multi-target Hacking. Ansterdam, Netherlands ETH Zürich: Computer Vision and Geometry Lab	12.05.2016
University Hannover: Ringvorlesung Navigation und Umweltrobotik	12.05.2010 11.05.2016
TU Dresden: Computer Vision Lab	22.04.2016
MPI Tübingen: Special Symposium on Intelligent Systems	22.04.2010 16.03.2016
Scenes from Video Workshop: Colchagua Valley, Chile	17.12.2015
ICCV Workshop on Autonomous Driving: Santiago, Chile	17.12.2015 12.12.2015
Google Research: Mountain View, USA	25.11.2015
Robert Bosch GmbH: Leonberg, Germany	23.11.2015 23.11.2015
Dagstuhl Seminar: Dagstuhl, Germany	09.11.2015
Daimler AG: Böblingen, Germany	27.08.2015
RSS Workshop on SLAM: Rome, Italy	27.08.2015
RWTH Aachen: GCPR PC Meeting	09.07.2015
CVPR Workshop on Performance Metrics: Boston, USA	11.06.2015
Karlsruhe Institute of Technology: Department of Economics and Management	30.04.2015
MPI Tübingen: ETH/MPI Vision Workshop	25.11.2014
MPI Stuttgart: Tag der offenen Tür	05.04.2014
ETH Zürich: Photogrammetry and Remote Sensing Lab	27.03.2014
Robert Bosch GmbH: Fahrzeugsicherheits- und Assistenzsysteme, Stuttgart	18.06.2013
Karlsruhe Institute of Technology: Ringvorlesung des Graduiertenkolleg 1194	03.05.2013
University of Illinois at Urbana-Champaign: Department of Computer Science	30.11.2012
New York University: Vision, Learning and Graphics Group	29.11.2012
Carnegie Mellon University: The Robotics Institute	28.11.2012
MIT: Computer Science and Artificial Intelligence Laboratory	27.11.2012
MPI Tübingen: Perceiving Systems Department	05.11.2012
TU Darmstadt: Interactive Graphics Systems Group	01.11.2012
RWTH Aachen: UMIC Research Centre Computer Vision Group	26.10.2012
ETH Zürich: Computer Vision and Geometry Lab	22.10.2012
University of Oxford: Robotics Research Group	24.09.2012
CVPR Workshop on Point Cloud Processing: Providence, USA	16.06.2012
Toyota Technological Institute at Chicago	19.07.2011
Robert Bosch GmbH: Computer Vision Systems, Hildesheim	14.01.2011
MPI Saarbrücken: Computer Vision and Multimodal Computing Department	06.12.2010
ETH Zürich: Computer Vision and Geometry Lab	27.05.2010
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PROFESSIONAL SERVICE / COMMISSIONS OF TRUST

PROGRAM CHAIR: DAGM GCPR 2020, CVPR 2023

AREA CHAIR: ECCV 2016, CVPR 2017, CVPR 2018, ECCV, 2018, ICCV 2019, CVPR 2020

PROGRAM COMMITTEE: NIPS 2012-now, ACCV 2012-now, IV 2010-now, ICCV 2013-now, ECCV 2014-now, CVPR 2013-now, GCPR 2015-now

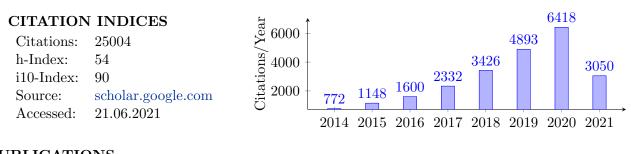
REVIEWER: NIPS, CVPR, ECCV, ICCV, GCPR, ACCV, PAMI, IJCV, IJRR, ICRA, IROS, IV, ITSC, TITS

MEMBER of Minister Bauer's delegation to Paris regarding French-German AI partnership, 2018 FELLOW of the European Laboratory of Learning and Intelligent Systems (ELLIS), 2019-now BOARD of the European Laboratory of Learning and Intelligent Systems (ELLIS), 2019-now COORDINATOR of the ELLIS PhD program and ELLIS board member, 2019-now STEERING BOARD of the Max Planck ETH Center for Learning Systems, 2018-2021 DEPUTY HEAD of the dept. of computer science at the University of Tübingen, 2020-now

Conference on Computer Vision and Pattern Recognition (CVPR) 2023 Program Chair jointly with Vladlen Koltun, Ross Girshick and Svetlana Lazebnik	
CVPR 2021: Robust Video Scene Understanding Jointly with Jonathon Luiten, Bastian Leibe, Laura Leal-Taixé, Fisher Yu and De	June 2021 va Ramanan
CVPR 2021: Workshop on Autonomous Driving Jointly with Andrea Vedaldi, Dragomir Anguelov, Fisher Yu, Luc Van Gool and Je	June 2021 ohn Leonard
German Conference on Pattern Recognition (GCPR) 2020 General Chair and Program Chair	September 2020
ECCV 2020: Robust Vision Challenge Jointly with Oliver Zendel, Daniel Scharstein, Vladlen Koltun and others	August 2020
CVPR 2020: Workshop on Benchmarking Multi-Target Tracking Jointly with Bastian Leibe, Laura Leal-Taixe, Aljosa Osep and Paul Voigtländer	June 2020
CVPR 2020: Workshop on Scalability in Autonomous Driving Jointly with Yuning Chai, Henrik Kretzschmar and Dragomir Anguelov	June 2020
CVSS 2019: Computational Vision Summer School Jointly with Hendrikje Nienborg, Siyu Tang and Bei Xiao	July 2019
ECCV 2018: Workshop on Autonomous Driving Jointly with Peng Wang, Ruigang Yang, Hongdong Li and Alan Yuille	September 2018
CVPR 2018: Workshop on Autonomous Driving Jointly with Ruigang Yang, Jose Alvarez and Fisher Yu	June 2018
CVPR 2018: Robust Vision Challenge Jointly with C. Rother, M. Niessner, M. Pollefeys, D. Scharstein and T. Sattler	June 2018
DALI 2018: Workshop on Autonomous Driving Jointly with Andrew Blake	June 2018
ECCV 2014: Reconstruction Meets Recognition Challenge Jointly with R. Urtasun, R. Fergus, D. Hoiem, A. Torralba, P. Lenz, N. Silberman, J.	September 2014 J. Xiao, S. Fidler
ACCV 2014: Intelligent Vehicle With Vision Technology Jointly with Xue Mei, Michael James, Yi-Ping Hung, Fatih Porikli and Danil Prok	September 2014 khorov
IV 2014: Workshop on Benchmarking Lane Detection Algorithms Jointly with Chunzhao Guo, José M. Álvarez and Jannick Fritsch	June 2014
ICCV 2013: Reconstruction Meets Recognition Challenge Jointly with R. Urtasun, R. Fergus, D. Hoiem, A. Torralba, P. Lenz, N. Silberman, J.	<i>December 2013</i> J. Xiao, S. Fidler
GCPR 2013: Special Session on Robust Optical Flow Jointly with Andrés Bruhns, Uwe Franke and Daniel Kondermann	September 2013

PUBLICATIONS

SCIENTIFIC IMPACT



PUBLICATIONS

All publications are peer-reviewed conference or journal publications and top tier in the respective field (computer vision, machine learning, robotics, intelligent vehicles). ICML, NIPS, ICCV, ECCV and CVPR are highly competitive with acceptance rates of less than 30%. CVPR is the most highly cited IEEE conference with the highest impact in Engineering and Computer Science. CVPR, ECCV, ICCV and NeurIPS are the four most impactful conferences in all of computer science¹. The most important publications as well as award papers are marked with an asterisk.

JOURNAL PAPERS

Lina Liu, Yiyi Liao, Yue Wang, Andreas Geiger, and Yong Liu. Learning steering kernels for guided depth completion. *IEEE Trans. on Image Processing (TIP)*, 30:2850–2861, 2021.

Jonathon Luiten, Aljosa Osep, Patrick Dendorfer, Philip Torr, Andreas Geiger, Laura Leal-Taixe, and Bastian Leibe. Hota: A higher order metric for evaluating multi-object tracking. *International Journal of Computer Vision (IJCV)*, 2020.

Peidong Liu, Joel Janai, Marc Pollefeys, Torsten Sattler, and Andreas Geiger. Self-supervised linear motion deblurring. *IEEE Robotics and Automation Letters (RA-L)*, 5(2):2475–2482, 2020.

David Stutz and Andreas Geiger. Learning 3d shape completion under weak supervision. In International Journal of Computer Vision (IJCV), 2018.

AlhaijaandHassan, MustikovelaandSiva, MeschederandLars, GeigerandAndreas, and RotherandCarsten. Augmented reality meets computer vision: Efficient data generation for urban driving scenes. *International Journal of Computer Vision (IJCV)*, 126(9):961–972, 2018.

Moritz Menze, Christian Heipke, and Andreas Geiger. Object scene flow. *ISPRS Journal of Photogrammetry and Remote Sensing (JPRS)*, 140:60–76, 2018.

Joel Janai, Fatma Güney, Aseem Behl, and Andreas Geiger. Computer vision for autonomous vehicles: Problems, datasets and state-of-the-art. *arXiv.org*, 1704.05519, 2017.

* Marcus A. Brubaker, Andreas Geiger, and Raquel Urtasun. Map-based probabilistic visual selflocalization. *IEEE Trans. on Pattern Analysis and Machine Intelligence (PAMI)*, 38(4):652–665, 2016.

* Andreas Geiger, Martin Lauer, Christian Wojek, Christoph Stiller, and Raquel Urtasun. 3D traffic scene understanding from movable platforms. *IEEE Trans. on Pattern Analysis and Machine Intelligence (PAMI)*, 36(5):1012–1025, 2014.

¹http://www.guide2research.com/topconf/

Andreas Geiger, Philip Lenz, Christoph Stiller, and Raquel Urtasun. Vision meets robotics: The KITTI dataset. International Journal of Robotics Research (IJRR), 32(11):1231–1237, 2013.

Andreas Geiger, Martin Lauer, Frank Moosmann, Benjamin Ranft, Holger Rapp, Christoph Stiller, and Julius Ziegler. Team annieway's entry to the grand cooperative driving challenge 2011. *IEEE Trans. on Intelligent Transportation Systems (TITS)*, 13(3):1008–1017, September 2012.

CONFERENCE PAPERS

Despoina Paschalidou, Angelos Katharopoulos, Andreas Geiger, and Sanja Fidler. Neural parts: Learning expressive 3d shape abstractions with invertible neural networks. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2021.

Shaofei Wang, Andreas Geiger, and Siyu Tang. Locally aware piecewise transformation fields for 3d human mesh registration. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition* (CVPR), 2021.

Fabio Tosi, Yiyi Liao, Carolin Schmitt, and Andreas Geiger. Smd-nets: Stereo mixture density networks. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2021.

Aditya Prakash, Kashyap Chitta, and Andreas Geiger. Multi-modal fusion transformer for endto-end autonomous driving. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition* (CVPR), 2021.

* Michael Niemeyer and Andreas Geiger. Giraffe: Representing scenes as compositional generative neural feature fields. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2021.

Axel Sauer and Andreas Geiger. Counterfactual generative networks. In Proc. of the International Conf. on Learning Representations (ICLR), 2021.

Katja Schwarz, Yiyi Liao, Michael Niemeyer, and Andreas Geiger. Graf: Generative radiance fields for 3d-aware image synthesis. In *Advances in Neural Information Processing Systems (NeurIPS)*, 2020.

Michael Oechsle, Michael Niemeyer, Christian Reiser, Lars Mescheder, Thilo Strauss, and Andreas Geiger. Learning implicit surface light fields. In *Proc. of the International Conf. on 3D Vision (3DV)*, 2020.

Hassan Alhaija, Siva Mustikovela, Varun Jampani, Justus Thies, Matthias Niessner, Andreas Geiger, and Carsten Rother. Intrinsic autoencoders for joint neural rendering and intrinsic image decomposition. In *Proc. of the International Conf. on 3D Vision (3DV)*, 2020.

Aseem Behl, Kashyap Chitta, Aditya Prakash, Eshed Ohn-Bar, and Andreas Geiger. Label efficient visual abstractions for autonomous driving. In *Proc. IEEE International Conf. on Intelligent Robots and Systems (IROS)*, 2020.

Xu Chen, Zijian Dong, Jie Song, Andreas Geiger, and Otmar Hilliges. Category level object pose estimation via neural analysis-by-synthesis. In *Proc. of the European Conf. on Computer Vision* (ECCV), 2020.

Songyou Peng, Michael Niemeyer, Lars Mescheder, Marc Pollefeys, and Andreas Geiger. Convolutional occupancy networks. In *Proc. of the European Conf. on Computer Vision (ECCV)*, 2020.

Eshed Ohn-Bar, Aditya Prakash, Aseem Behl, Kashyap Chitta, and Andreas Geiger. Learning sit-

uational driving. In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2020.

Carolin Schmitt, Simon Donne, Gernot Riegler, Vladlen Koltun, and Andreas Geiger. On joint estimation of pose, geometry and svbrdf from a handheld scanner. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2020.

Aditya Prakash, Aseem Behl, Eshed Ohn-Bar, Kashyap Chitta, and Andreas Geiger. Exploring data aggregation in policy learning for vision-based urban autonomous driving. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2020.

Despoina Paschalidou, Luc van Gool, and Andreas Geiger. Learning unsupervised hierarchical part decomposition of 3d objects from a single rgb image. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2020.

Michael Niemeyer, Lars Mescheder, Michael Oechsle, and Andreas Geiger. Differentiable volumetric rendering: Learning implicit 3d representations without 3d supervision. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2020.

Yiyi Liao, Katja Schwarz, Lars Mescheder, and Andreas Geiger. Towards unsupervised learning of generative models for 3d controllable image synthesis. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2020.

Anurag Ranjan, Joel Janai, Andreas Geiger, and Michael Black. Attacking optical flow. In Proc. of the IEEE International Conf. on Computer Vision (ICCV), 2019.

Michael Niemeyer, Lars Mescheder, Michael Oechsle, and Andreas Geiger. Occupancy flow: 4d reconstruction by learning particle dynamics. In *Proc. of the IEEE International Conf. on Computer Vision (ICCV)*, 2019.

Michael Oechsle, Lars Mescheder, Michael Niemeyer, Thilo Strauss, and Andreas Geiger. Texture fields: Learning texture representations in function space. In *Proc. of the IEEE International Conf. on Computer Vision (ICCV)*, 2019.

Benjamin Coors, Alexandru Paul Condurache, and Andreas Geiger. Nova: Learning to see in novel viewpoints and domains. In *Proc. of the International Conf. on 3D Vision (3DV)*, 2019.

* Lars Mescheder, Michael Oechsle, Michael Niemeyer, Sebastian Nowozin, and Andreas Geiger. Occupancy networks: Learning 3d reconstruction in function space. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2019.

* Zhaoyang Lv, Frank Dellaert, James M. Rehg, and Andreas Geiger. Taking a deeper look at the inverse compositional algorithm. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2019.

Gernot Riegler, Yiyi Liao, Simon Donne, Vladlen Koltun, and Andreas Geiger. Connecting the dots: Learning representations for active monocular depth estimation. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2019.

Aseem Behl, Despoina Paschalidou, Simon Donne, and Andreas Geiger. Pointflownet: Learning representations for rigid motion estimation from point clouds. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2019.

Despoina Paschalidou, Ali Osman Ulusoy, and Andreas Geiger. Superquadrics revisited: Learning 3d shape parsing beyond cuboids. In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2019. Simon Donne and Andreas Geiger. Learning non-volumetric depth fusion using successive reprojections. In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2019.

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