CALL FOR PAPERS

CVPR 2018 Workshop on Autonomous Driving

The CVPR 2018 Workshop on Autonomous Driving (WAD) is the combined venue for The 9th international *Workshop on Computer Vision in Vehicle Technology* (CVVT) and perception challenges with newly collected and fine-annotated large scale datasets. It aims to get together researchers and engineers from academia and industries to discuss computer vision applications in autonomous driving. In this one and half day work, we will have regular paper presentations, invited speakers, panel discussions, and technical benchmark challenges to present the current state of the art, as well as the limitations and future directions for computer vision in autonomous driving, arguably the most promising application of computer vision and AI in general.

PAPER Track

We invite the submission of original research contributions in computer vision addressed to:

- Autonomous navigation and exploration based on vision and 3D.
- Vision based driving assistance, driver monitoring and advanced interfaces.
- Vision systems for unmanned aerial vehicles.
- Deep Learning, machine learning, mathematical imaging and image analysis techniques in vehicle technology.
- Non-verbal and graphical information for remote-driver assistance of long-distance exploration.
- Performance evaluation without ground truth and reconstruction from one time measurements in natural environments.
- On-board calibration of multi-camera acquisition systems (stereo rig, multimodal, networks).
- Reconstruction without classical features such as planes, lines and linear objects and terrain generation from multi-view and omnidirectional camera networks.
- Large-scale computer vision and geo-localization for driving, navigation and exploration.

Submission details can be found at http://www.wad.ai/paper.html

CHALLENGE Track

We will host a challenge to understand the current status of computer vision algorithms in solving the environmental perception problems for autonomous driving. We have prepared a number of large scale datasets with fine annotation, collected and annotated by Berkeley Deep Driving Consortium or Baidu Inc. Based on the datasets, we have define a set of four realistic problems and encourage new algorithms and pipelines to be invented for autonomous driving. More specifically, they are (1) Drivable Area Segmentation; (2) Road Object Detection; (3) Domain Adaptation of Semantic Segmentation, and (4) Instance-level video moving object segmentation. Participation details can be found at http://wad.ai/challenge.html

IMPORTANT DATES

Papers		Challenge	
Submission	March 20th	Launch	March 10th
Notification	April 2th	Close	May 15th
Camera-ready	April 12th	Paper Submission	May 25th
		Camera Ready	June 8th
CVPR Workshop: June 18, 2018			

Chairs

Jose M. Alvarez, *TRI*
Fisher Yu, *Berkeley*
Ruigang Yang, *Baidu*

Confirmed Speakers

Andreas Geiger, *MPI*
Andrej Karpathy, *Tesla/Stanford*
Kurt Keutzer, *UC Berkeley*
Vladlen Koltun, *Intel*
Will Maddern, *Oxford Robotics Inst.*
Edwin Olson, *University of Michigan*
Silvio Savarese, *Stanford University*
Dawn Song, *UC Berkeley*

Program Committee

Alper Ayvaci, *Honda Research*
Andreas Geiger, *MPI*
Trevor Darrell, *UC-Berkeley*
Markus Enzweiler, *Daimler AG*
Friedrich Fraundorfer, *TU Graz*
Uwe Franke, *Daimler R&D*
David Gerónimo, *Catchoom Tech.*
Riad Hammoud, *BAE Systems*
David Held, *Stanford University*
Xinyu Huang, *Baidu*
Atsushi Imiya, *IMIT Chiba U.*
Michael James, *Toyota Research*
Hongdong Li, *ANU*
John Leonard, *MIT*
Antonio M. Lopez, *Universitat Autònoma de Barcelona*
Will Maddern, *Oxford Univ.*
Michael Milford, *ACRV & QUT*
Dinesh Manocha, *UNC*
Tomas Pajdla, *Czech Tech. Univ.*
Srikumar Ramalingam, *MERL*
German Ros, *CVC & UAB*
Angel Sappa, *CVC*
Davide Scaramuzza, *U. of Zurich*
Korbinian Schmid, *DLR*
David Vázquez, *Universitat Autònoma de Barcelona*
Jianxiong Xiao, AutoX
Alan Yuille, John Hopkins Univ.
Dequan Wang, UC-Berkeley
Peng Wang, *Baidu*

http://www.wad.ai/