

## **W15 – Anticipating Human Behavior**

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In contrast to humans that are very good in anticipating the behavior of other objects, animals, or humans, developing methods that anticipate human behavior from video or other sensor data is very challenging and has just recently received an increase of interest. The purpose of the workshop *Anticipating Human Behavior* was therefore to discuss recent approaches that anticipate human behavior from video or other sensor data, to bring together researchers from multiple fields and perspectives, and to discuss major research problems and opportunities and how we should coordinate efforts to advance the field.

For the workshop, 9 out of 16 submissions were accepted and presented as talks at the workshop. All accepted papers are published in these proceedings and cover the anticipation of trajectories, hands, objects, actions, video frames, and semantic segmentation. In addition, we had two invited keynote talks by Michael S. Ryoo (Indiana University, USA) on *Robots Anticipating Future Scene* and by Dariu M. Gavrila (Delft University of Technology, The Netherlands) on *Vulnerable Road User Path Prediction*. Furthermore, 11 posters were presented which included already published work as well as work in progress:

- Long Zhao et al. *Learning to Forecast and Refine Residual Motion for Image-to-Video Generation*
- Haoye Cai et al. *Deep Video Generation, Prediction and Completion of Human Action Sequences*
- Liang-Yan Gui et al. *Adversarial Geometry-Aware Human Motion Prediction*
- Marcos Baptista-Ríos et al. *Embarrassingly Simple Model for Early Action Proposal*
- Federico Becattini et al. *Am I done? Predicting Action Progress in Video*
- Fatemeh Ziaetabar et al. *A Novel Semantic Framework for Anticipation of Manipulation Actions*
- Yazan Abu Farha et al. *When will you do what? - Anticipating Temporal Occurrences of Activities*
- Philipp Kratzer et al. *Motion Prediction with Gaussian Process Dynamical Models and Trajectory Optimization*
- Nicholas Rhinehart et al. *R2P2: A Reparameterized Pushforward Policy for Diverse, Precise Generative Path Forecasting*
- Yuge Shi et al. *Action Anticipation with RBF Kernelized Feature Mapping RNN*
- Camille Couprie et al. *Predicting Future Instance Segmentations by Forecasting Convolutional Features*

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