



Vision-Language Fusion and Reasoning in Visual Grounding



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Date : 1 December 2020 (Tuesday)

Time : 11:00 a.m. - 12:00 noon

► Abstract

The understanding of human cognition with high-level semantics serves the main challenge of the interaction between vision and language. Natural language involves the cognitive understanding of the world, which is more complicated than visual perception. The understanding of visual content, natural language, and their relationship is critical for exploring human cognition beyond perception. In this seminar, we focus on vision-language fusion and reasoning in visual grounding that is a fundamental problem in vision-language interaction. Visual grounding aims to locate the referent that is the corresponding visual region referred to by a natural language expression in an image. The challenge of it is that the natural language sentence is generated in unconstrained scenes, which normally not only describes the appearance of the referent but also its relationships to other objects. I will introduce state-of-the-art research work from two perspectives of relationship-embedded cross-modal fusion and language-driven visual reasoning.

► About the Speaker

Dr Yang received her Ph.D. degree from the University of Hong Kong in 2020. Her Ph.D. study is awarded by Hong Kong Ph.D. Fellowship. Before that, she obtained her B.S. degree in computer science from Chu Kochen Honors College at Zhejiang University in 2016. Her general research interests span computer vision, natural language processing, machine learning, and the intersection of them. Dr Yang has published several papers in top-tier academic journals and conferences including TPAMI, CVPR, ICCV, ECCV and AAAI. She has been serving as a reviewer for numerous academic journals and conferences such as TIP, NeurIPS, CVPR, WACV and ACCV.

ALL are welcome!

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