报告

图像理解和医学图像分析方面的近期工作
Recent Work on Image Understanding and Medical Image Analysis
俞益洲教授｜香港大学计算机科学系教授
Professor Yizhou YU｜Department of Computer Science, Professor
The University of Hong Kong

讲者介绍 Biography

Yizhou Yu is a professor in the Department of Computer Science at the University of Hong Kong. Previously he was a professor at University of Illinois, Urbana-Champaign (UIUC) from 2000 to 2012. He has also collaborated with industrial research labs, including Baidu Research, Google Brain and Microsoft Research. He received his PhD degree in computer science from University of California, Berkeley. Professor Yu has made significant contributions to AI and visual computing, including deep learning, computer vision, and computer graphics. He is an ACM Distinguished Member, IEEE Fellow as well as a recipient of US National Science Foundation CAREER Award, ACCV Best Application Paper Award and ACM SCA Best Paper Awards. His current research interests also include biomedical data analysis, computational visual media, and geometric processing. Professor Yu has served as an associate editor of international journals, including IET Computer Vision, IEEE Transactions on Visualization and Computer Graphics, The Visual Computer and International Journal of Software and Informatics. He has also served on the program committee of many leading international conferences, including SIGGRAPH, SIGGRAPH Asia, and International Conference on Computer Vision.

报告摘要 Abstract

In recent years, we have witnessed technological breakthroughs in the fields of deep learning and image understanding. In this talk, I share a few examples of my recent work on image understanding and medical image analysis. In the first part on image understanding, I present projects on fine-grained image classification based on either transfer learning or weakly supervised learning, salient object detection in images or videos, language-guided object identification in images, RGB-D scene labeling as well as weakly supervised learning for object detection and semantic segmentation. In the second part on medical image analysis, I present projects on 3D medical volume segmentation based on global guidance and progressive fusion as well as automated chest X-ray interpretation using mixed supervised learning.

有兴趣合作之项目 Interested topics for future collaboration

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