中国计算机学会计算机视觉专委会走进高校系列报告会
CCF－CV Series Lectures
南开大学·天津（第 15 期）

2016 年 6 月 13 日（星期三）14:00-17:30
南开大学津南校区计控学院 523 会议室

报告会主题

计算机视觉前沿技术及应用

程　序

13:30　　签到

14:00　　报告会开始

特邀讲者：王亮　博士，中国科学院自动化所研究员
演讲题目：**Deep Learning and Its Application in Video Analysis**

特邀讲者：王井东　博士，微软亚洲研究院
演讲题目：**Fusion for deep learning: regularization transfer learning and deeply-fused nets**

特邀讲者：潘纲　博士，浙江大学计算机学院教授
演讲题目：脉冲神经网络：现状、趋势、与应用

特邀讲者：张兆翔　博士，中国科学院自动化所研究员
演讲题目：**相似度度量学习及其在计算机视觉中的应用**

执行主席：程明明 博士，南开大学副教授
　　　　　　中国计算机学会计算机视觉专委会委员

参加人员：视觉领域专业人士、研究生、媒体、其他有兴趣者
报名方式：在线报名：https://www.wenjuan.com/s/jiAJVz/
参加方式：免费参加，敬请光临。

特邀讲者　王亮

Liang Wang received the PhD degree from the Institute of Automation, Chinese Academy of Sciences (CAS) in 2004. From 2004 to 2010, he worked as a Research Assistant at Imperial College London, United Kingdom and Monash University, Australia, a Research Fellow at the University of Melbourne, Australia, and a lecturer at the University of Bath, United Kingdom, respectively. Currently, he is a full Professor and the deputy director of the National Lab of Pattern Recognition, Institute of Automation, Chinese Academy of

Sciences, P. R. China. Dr. Wang is the recipient of the Chinese Academy of Sciences "100 Talents Program" in 2010, and NSFC "Outstanding Young Researcher" Program in 2015. His major research interests include machine learning, pattern recognition and computer vision. He has widely published at highly-ranked international journals such as IEEE TPAMI and IEEE TIP, and leading international conferences such as CVPR, ICCV and ICDM. He has obtained several honors and awards such as China Youth Science and Technology Award and the Special Prize of the Presidential Scholarship of Chinese Academy of Sciences. He is currently a Senior Member of IEEE and a Fellow of IAPR, as well as a member of BMVA. He is an associate editor of IEEE Transactions on Cybernetics and IEEE Transactions on Information Forensics and Security.

报告摘要：Multimedia Deep learning is a powerful technique which can learn discriminative and task-oriented representations for data contents in various pattern recognition and computer vision applications. This talk will first review the background of deep learning, including deep neural networks, deep learning and its applications to video analysis and understanding. Then we will describe our recent works on deep learning for different video applications such as video super-resolution, gait recognition, action recognition, and event analysis. Finally, we give some future directions.
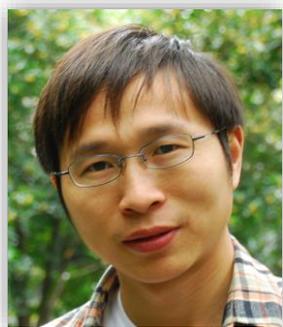
特邀讲者　王井东

Jingdong Wang is a Lead Researcher at the Visual Computing Group, Microsoft Research Asia. His areas of interest include computer vision, multimedia, and machine learning. At present, he is mainly working on image search including interactive image search, indexing and compact coding for large scale similarity search, and visual understanding including (fine-grained) image recognition, salient object detection, person re-identification, and image segmentation. He has published 100+ papers in top conferences and prestigious international journals, such as CVPR, ICCV, ACMMM, ICML, SIGIR, TPAMI, IJCV, and so on, and one book. He has served as an area editor for TMM, an area chair in ECCV 2016, ACMMM 2015 and ICME 2015, a track chair in ICME 2012, a special session chair in ICMR 2014, and a program committee member or a reviewer in top conferences and journals, including CVPR, ICCV, ACMMM, NIPS, SIGIR, SIGGRAPH, TPAMI, IJCV. He has shipped dozens technologies to Microsoft products, including Bing image search, Project Oxford, and XiaoIce.

报告摘要：In this talk, I will introduce our study on the fusion approach in deep learning. First, I will introduce a regularization approach, disturblabel. Second, I will multi-scale fusion with activeness propagation for transfer learning. Finally, I will present a general framework, deeply-fused nets, which trains deep networks with and as shallow networks.

特邀讲者 潘纲

潘纲，浙江大学计算机学院教授、博导、博士，计算机系统所副所长，中国计算机学会普适计算专委会常务委员，中国人工智能学会脑机融合与生物机器智能专委会委员，。主要研究方向为人工智能、计算机视觉、普适计算、脑机融合。入选教育部新世纪优秀人才支持计划、浙江省杰出青年科学基金等。已发表论文 100 多篇（包括 IEEE TPAMI，TIP，TNNLS，ACM Computing Survey 等权威期刊，以及 CVPR,ICCV, IJCAI, Ubicomp 等国际权威会议），获授权发明专利 16 项。相关成果获国内外众多媒体关注，包括中央电视台、新华社、凤凰卫视等华语媒体，以及《New Scientist》、《Wired》等国外知名媒体网站。获国家科学技术进步奖二等奖（第 2 完成人）、教育部科技进步一等奖（第 2 完成人）。《IEEE Systems Journal》、《Chinese Journal of Electronics》编委。

报告摘要：脉冲神经网络由于比传统人工神经网络具有更好的生物逼真性，近年来得到研究人员越来越多的关注。本报告将简介脉冲神经网络原理，分析当前研究现状与发展趋势，介绍若干脉冲神经网络的典型应用。最后还将展现课题组近年相关的研究进展。

特邀讲者 张兆翔

张兆翔，博士，中国科学院自动化研究所研究员，中国科学院脑科学与智能技术卓越创新中心年轻骨干，IEEE 高级会员，计算机学会 YOCSEF 委员，计算机视觉专委会委员，模式识别与人工智能专委会委员，人工智能学会模式识别专委会副秘书长，中国电子学会青年科学家俱乐部成员。2004 年毕业于中国科学技术大学，获得电子科学与技术专业学士学位；2004 年进入中国科学院自动化研究所硕博连读，于 2009 年获得工学博士学位；2009 年入职北京航空航天大学计算机学院，历任讲师、副教授、硕士生导师、计算机应用技术系副主任。2015 年通过公开竞聘任职中国科学院自动化研究所类脑智能研究中心研究员。张兆翔博士一直从事计算机视觉、模式识别领域的研究工作，在借鉴人脑视觉认知机理构建视觉计算模型方面开展了系统工作，在面向国家公共安全和智慧城市监管需求的系统平台上取得成功应用，取得显著社会影响和经济效益，近五年来在国际主流学术期刊与会议上发表论文 95 篇，SCI 收录期刊论文 35 篇，担任了 ICPR、IJCNN、AVSS、PCM 等多个国际会议的程序委员会委员，SCI 期刊《Neurocomputing》副主编，《IEEE Access》副主编，《Frontiers of Computer Science》青年副主编和 TPAMI、TIP、TCSVT、PR 等 20 余个本领域主流期刊的审稿人。入选"教育部新世纪优秀人才支持计划"、"北京市青年英才计划"和"微软亚洲研究院铸星计划"。

报告摘要：度量学习是机器学习领域的重要研究内容，在计算机视觉的诸多问题上取得了成功应用。然而传统的基于成对策略的度量学习方法存在明显局限性，如对样本的标签信息利用不足，往往面临正负样本的不均衡性，无法充分刻画多个标签之间的相对关联信息等。在本报告中，我们对传统的度量学习方法加以延伸，介绍一种相似度度量学习方法，能够充分利用训练集中的样本信息和标签信息，有效刻画不同样本和标签之间的相对相似度。该方法在理论上具有良好的数学特性，在计算机视觉的多个应用上展示一定的优越性和便捷性。

会场路线图

CCF-CV 网站：http://www.ccfcv.org/

CCF-CV 公众号：