



ONLINE SEMINAR 2021 SERIES

Department of Computer Science



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Registration: http://bit.ly/bucs-ereg

(*Zoom details will only be provided to registrants)



Al-powered Image Perception for Vision and Healthcare



ABSTRACT

As indicated in a famous adage "A picture is worth a thousand words", images usually convey a lot of information. It is desirable to separate input images into multiple layers via image perception algorithms for people to understand them easily. In this talk, I will present our image perception works, which benefit outdoor vision systems, multimedia, and healthcare. First, I will present our innovative methods to address adverse weather image restoration for outdoor vision systems. Then, I will talk about our works on the multimedia era, which separate input photos into layers with textures, shadows, lanes, saliency, and so on. Lastly, I will also describe our AI-based healthcare algorithms



BIOGRAPHY

Lei Zhu is working as a postdoctoral researcher at Department of Applied Mathematics and Theoretical Physics, University of Cambridge. Before that, he has been a postdoctoral researcher at the Hong Kong Polytechnic University and the Chinese University of Hong Kong. He received his PhD degree at Department of Computer Science and Engineering from the Chinese University of Hong Kong in 2017. His research interest is to develop Alpowered image perception theory and algorithms for outdoor vision systems, multimedia, and healthcare. In past a few years, his works have been published in top-tier conferences or journals, including CVPR/ICCV/ECCV, AAAI/IJCAI/ACMMM, IEEE TPAMI/TIP/TMM/TCSVT/, IEEE TMI/Medical Image Analysis/MICCAI, and so on. He has served on an area chair for ACM MM 2021, and continuously reviewed for top journals and conferences (CVPR, ICCV, ECCV, ICLR, AAAI, IJCAI, ACM MM, MICCAI, IEEE TIP, TMM, TCSVT, TMI, etc.). According to Google Scholar, he has an h-index of 20 and 1370+ citations.