PolyU RC-DSAI and HKISI-CAS Joint PhD Supervision Scheme
(January 2022 entry)

The Research Centre on Data Science and Artificial Intelligence (RC-DSAI) of The Hong Kong Polytechnic University (PolyU) and the Centre for Artificial Intelligence and Robotics, Hong Kong Institute of Science & Innovation, Chinese Academy of Sciences (HKISI-CAS) are now recruiting young talents to apply for the Joint PhD Supervision Scheme under a collaborative research project on "Frontier Research in Data Science and Artificial Intelligence".

To address the societal problems that arise from Industry 4.0 and urbanization, the project focuses on exploring the possibilities in the following specific areas:

- **Fundamental AI techniques**
- **Big data management and analytics**
- **Computational AI theory and algorithms**
- **Visual computing with big multimedia data**

Successful applicants will receive an **excellent remuneration package** including:

- A scholarship for four years with an annual stipend of HK$217,200;
- Financial support to attend international conferences for paper presentations;
- Internship opportunity at HKISI-CAS; and
- Free access to the research facilities in RC-DSAI at PolyU and HKISI-CAS at Hong Kong Science Park.

The degree of PhD will be awarded solely by The Hong Kong Polytechnic University and we are inviting applications for the **January 2022 entry**.
Proud History and Achievement of PolyU COMP

The Department of Computing (COMP) has a proud history of over 46 years. It was established in 1974 as the first department offering computing higher education in the territory, nurturing professional talents to support society’s advancement. Today, COMP has gained international recognition in world-class research and high quality education. We have been recognized globally in various world university rankings.

Among our dedicated team of academic staff, there are six IEEE Fellows, two ACM Distinguished Members, one IAPR Fellow, one IET/IEE Fellow, two Member of Academia Europaea, one SPIE Fellow, and two Highly Cited Researchers.

In the last five years, COMP has secured over 150 competitive external grants and consultancy/collaborative projects of HK$170 million.

理大電子計算學系擁有悠久歷史及卓越成就

香港理工大學電子計算學系(COMP)擁有超過46年的輝煌歷史。它成立於1974年，是香港首個提供計算機高等教育的學系之一，旨在培養專業人才以支持社會進步。今天COMP在世界一流的研究和高質量的教育中獲得了國際認可，並且在各項世界大學排名中位列前茅。

在我們敬業的學術人員團隊中，有六名IEEE院士、兩名ACM傑出會員、一名IAPR院士、一名IET/IEE院士、兩名歐洲科學院院士、一名SPIE院士和兩名高被引學者。在過去五年中，COMP更獲得了超過150個具有競爭力的外部撥款和諮詢/合作項目，總金額達1.7億港元。
Project Supervisors 項目指導教授

Prof. Qi Li's research interests include multi-modal data fusion, social media mining, event modeling and detection, and sentiment analysis. He has authored/co-authored over 480 publications in these areas. As of 2020, his publications have been cited more than 18,200 times in literature. Prof. Li is actively involved in the research community and has served as an associate editor of a number of major technical journals including IEEE Transactions on Artificial Intelligence (TAl), IEEE Transactions on Cognitive and Developmental Systems (TCDE), IEEE Transactions on Knowledge and Data Engineering (TKDE), ACM Transactions on Internet Technology (TOIT), Data Science and Engineering (DSE), and World Wide Web (WWW), in addition to being a Conference and Program Chair/Co-Chair of numerous major international conferences. He also sits/sat in the Steering Committees of DASFAA, ACM RecSys, IEEE U-MEDIA, and ICWL. Prof. Li is a Fellow of IEE/IEE (UK) and a distinguished member of CCF (China). Prof. Li will lead the research of Big Data Management and Analytics.

Prof. Lei Zhang's research interests include Computer Vision, Image and Video Analysis, Pattern Recognition, and Machine Learning, etc. He has published more than 200 papers in those areas. Prof. Zhang and his team have developed many well-known algorithms on visual enhancement, image recognition and image modeling. He was elevated to IEEE Fellow for his contribution to sparsity-based image modeling and perceptual image quality assessment in 2018. As of 2021, his publications have been cited more than 64,000 times in literature. Prof. Zhang's research has been attracting significant attention from the industry, and he received research funds from Alibaba, Dji, Huawei, and Sony, etc. He is a Senior Associate Editor of IEEE Trans. on Image Processing, and is an Associate Editor of IEEE Transactions on Pattern Analysis and Machine Intelligence, SIAM Journal of Imaging Sciences, IEEE Trans. on CSVT, and Image and Vision Computing, etc. He was listed as a “Clarivate Analytics Highly Cited Researcher” consecutively from 2015 to 2021. Prof. Zhang will lead the research of Fundamental DS & AI Techniques.

Prof. Changwen Chen's research interests include Multimedia Communication, Internet of Video Things (IoVT), GAN/CNN for Image Aesthetics, Immersive Tele-systems, Machine Learning, Mobile Virtual Reality, etc. He served as the Editor-in-Chief for IEEE Transactions on Multimedia from 2014 - 2016. He has also served as Conference Chair for several major IEEE, ACM and SPIE conferences related to multimedia video communications and signal processing. Prof. Chen's research has been supported widely by the industry including NSF, DARPA, Air Force, NASA, Whitaker Foundation, Microsoft, Intel, Kodak, Huawei, and Technicolor. With his exceptional research efforts, Prof. Chen has been named an IEEE Fellow and SPIE Fellow. He has also received a series of research and professional achievement awards, including the University at Buffalo Exceptional Scholar - Sustained Achievement Award in 2012, the State University of New York System Chancellor's Award for Excellence in Scholarship and Creative Activities in 2016, and the Distinguished ECE Alumni Award from University of Illinois at Urbana-Champaign in 2019.

Prof. Zhaoxiang Zhang is a full professor with the National Laboratory of Pattern Recognition (NLPR), CASIA, and an adjunct professor with The Hong Kong Polytechnic University (PolyU). He is the Executive Director and a professor of the Centre for Artificial Intelligence and Robotics, the Hong Kong Institute of Science & Innovation, Chinese Academy of Sciences. His research interests include pattern recognition, computer vision, machine learning, and bio-inspired visual computing. He has published more than 200 papers in reputable international journals (like IEEE Trans., IJCV, JMLR) and conferences (like CVPR, ICCV, NeurIPS). He has won the best paper awards in several conferences and championships in international competitions. He is serving or served as the Associate Editor of reputable journals like IEEE T-CSVT, Pattern Recognition and the Area Chair of top-level international conferences like CVPR, ICCV, AAAI, IJCAI, ACM MM. He has been awarded with 'The Changjiang Distinguished Professor' and 'The National Youth Talent Support Program'. He is a senior member of IEEE.

Prof. Lei is a full professor with the National Laboratory of Pattern Recognition (NLPR), CASIA, and an adjunct professor with The Hong Kong Polytechnic University (PolyU). His research interests include computer vision, pattern recognition, image processing, video analytics and biometrics. He has published more than 190 papers in international journals and conferences, including IEEE TPAMI/TIP/TIFS/CVPR/ICCV/ECCV, which have been cited more than 17000 times (by Google Scholar, with H-index: 64). Prof. Lei holds 18 invention patents and has drawn up 7 national/industry standards. He is listed as the 2020 Highly Cited Chinese Researcher. He serves as the associate editor of Pattern Recognition, Neurocomputing and IET computer vision, and serves as an area chair of ICB, ICB, BATS, FGR etc. He has won 10+ times the best paper awards and challenges in international conferences. He is the winner of 2019 IAPR YOUNG BIOMETRICS INVESTIGATOR AWARD. He is a senior member of the IEEE and CCF.
Application Period
From now to 17 September 2021. Consideration of applications is on a rolling basis.

Application Procedures
Applicants should submit an online application to the Departmental Research Committee (DRC) of the Department of Computing via the PolyU eAdmission system within the application period. Please refer to the PolyU e-Prospectus for the general admission requirements and supporting documents required.

Result Announcement
Successful applicants will receive an admission offer from PolyU via email between October and November 2021.