HKUST Researchers Developed Novel Image-based Analytics that Recommend More Relevant Restaurants and Lifestyle Choices

Without scrolling down the endless listing of restaurants and food choices in a Facebook fanpage or Instagram mobile application, some novel machine learning and big data technologies already learnt your craving and locate the best 3 nearby restaurants to satisfy your taste buds tonight. In the era of social media and mobile application, massive user-shared images are widely accessible to provide useful hints for machines to learn our daily needs and even dining preferences.

A Ph.D. student, Pak-Ming Cheung, supervised by Prof. James She from Social Media Lab. in the Department of Electronic & Computer Engineering, has developed a novel deep learning-based analytic technology that detect subtle social signals from user-shared images to learn users’ interests, behaviors and their connections with others. With such social intelligence, a lifestyle-related mobile application can recommend more relevant information or product choices to better fit the user tastes and needs in real-time.

With the helps from the University’s Technology Transfer Centre, the research team has successfully licensed and integrated their image-based analytics into a lifestyle mobile application - “飲食男女” launched recently by an influential lifestyle digital media and magazine, Eat and Travel Weekly (飲食男女) in Hong Kong. This patent-filed technology has been powering this mobile application to recommend more relevant restaurants or food choices to their users everyday. The invention has proved that it brings a higher recommendation responses than other common social computing or machine learning technologies in the industry. The technology is believed to provide the same impacts to travel, fashion, or art related applications, which usually contains the big data of user-shared images. Starting from tonight, you should enjoy a more social and tasteful lifestyle!