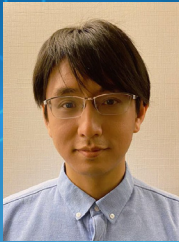




RESEARCH SEMINAR

Improving Data Quality with Collective Wisdom - A Cost-Efficient Approach



Dr Chen ZHANG Jason
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The Hong Kong Polytechnic University

Date : 2 February 2023 (Thu)

Time : 10:00 am - 11:00 am

Hybrid : PQ703 / Zoom

Abstract

Data quality is a critical aspect of any business or organization, as it directly impacts the accuracy and reliability of decision-making processes. Ensuring high-quality data can be a challenging task, particularly when working with imperfect humans. One approach that has proven effective in improving data quality is leveraging the collective wisdom of a group of people through crowdsourcing.

In this seminar, we will discuss the use of crowdsourcing as a means of enhancing data quality, with a particular focus on implementing these techniques on public crowdsourcing platforms such as Amazon Mechanical Turk. We will explore strategies for minimizing the number of questions asked to the crowd in order to reduce costs, as well as effective approaches for integrating and cleaning data using crowdsourcing. The seminar will also discuss the advantages of using collective knowledge to improve data quality, including increased accuracy, diverse viewpoints, and cost-effectiveness. Additionally, we will consider how the solutions discussed in this seminar can be applied to other research problems in data quality.

About the Speaker

Dr Zhang Chen is currently serving as a Research Assistant Professor in the Department of Computing at PolyU. He received his Ph.D. in Computer Science and Engineering from The Hong Kong University of Science and Technology (HKUST) in 2015, and has since been working to advance the field of data science and machine learning through his research. Prior to joining the Department of Computing, Dr Zhang gained valuable experience in both academia and industry, including a role as a senior manager of the Big Data Institute at HKUST, where he managed research projects and collaborated with industry partners. He has also gained valuable insights through his work in the hospitality industry, including roles at TEDA Hotels Management Company Limited, HNA Hospitality Group, and Yingjie International Hotels Management Company. Dr Zhang is constantly seeking new opportunities to learn and grow, and is always open to collaborating with others in the fields of data science and machine learning, as well as interdisciplinary research.