

Title: Leveraging Unlabeled Data: From “learning” to “learning+reasoning”

Abstract:

It is generally expensive or even infeasible to collect a huge amount of labeled training data in many practical applications, and therefore, leveraging unlabeled data is attracting more and more attention. In this talk, we will briefly introduce the efforts of leveraging unlabeled data, from “pure learning” solutions that exploit unlabeled data by using machine learning only, to a recent “learning + reasoning” solution that exploits machine learning and logical reasoning together.

Bio:

Zhi-Hua Zhou is Professor of Computer Science and Artificial Intelligence at Nanjing University. His research interests are mainly in machine learning and data mining, with significant contributions to ensemble methods, weakly supervised learning, multi-label learning, etc. He has authored the books "Ensemble Methods: Foundations and Algorithms", "Machine Learning (in Chinese)", etc., and published more than 200 papers in top-tier journals or conferences. According to Google Scholar, his publications received 60,000+ citations, with H-index 105. Many of his inventions have been successfully applied in industry. He is a Fellow of the ACM, AAAI, AAAS, IEEE, and recipient of the National Natural Science Award of China, the IEEE Computer Society Edward J. McCluskey Technical Achievement Award, etc.