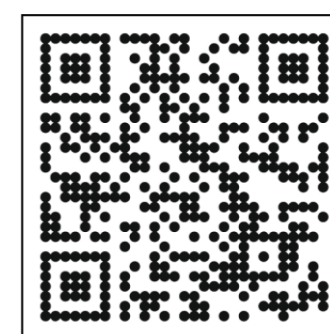




北京大学前沿计算研究中心
Center on Frontiers of Computing Studies, Peking University

静园5号院
杰出讲座



CFCS 杰出讲座系列 Distinguished Lecture Series

Mathematical and Scientific Discovery: A New Frontier for AI



Prof. Bart Selman

Joseph C. Ford Professor of Engineering and Computer Science
Cornell University

🎤 Host: 王鹤 助理教授

🕒 2024年11月19日 星期二 14:00

📍 静园五院204会议室

Abstract

Mathematical and scientific discovery provide a challenging and exciting new frontier for AI. I will discuss how key advances in automated reasoning technology can complement data-driven deep learning methods. Combining reasoning and learning can uncover novel domain structure and insights that lie beyond human cognition. I will illustrate the power of an integrated data-and-knowledge driven framework, capturing a form of non-human AI, with examples from discrete mathematics and materials science.

Biography

Bart Selman is the Joseph C. Ford Professor of Engineering and Computer Science at Cornell University. Prof. Selman is past-President of the Association for the Advancement of Artificial Intelligence (AAAI), the leading international professional society for AI researchers and practitioners. Prof. Selman was previously at AT&T Bell Laboratories. His research interests include artificial intelligence, computational sustainability, efficient reasoning procedures, machine learning, deep learning, deep reinforcement learning, planning, knowledge representation, and connections between computer science and statistical physics. He has (co-)authored over 150 publications, including six best paper awards and two classic paper awards. His papers have appeared in venues spanning Nature, Science, Proc. Natl. Acad. of Sci., and a variety of conferences and journals in AI and Computer Science. He is a Fellow of the American Association for Artificial Intelligence (AAAI), a Fellow of the American Association for the Advancement of Science (AAAS), and a Fellow of the American Association for Computing Machinery (ACM). He is the recipient of the Inaugural IJCAI John McCarthy Research Award.

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