

BO JIANYUAN

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🎓 EDUCATION

Singapore Management University , Singapore	Aug 2020 – Present
<i>PhD in Computer Science (Artificial Intelligence & Data Science)</i> , expected July 2025	
Singapore Management University , Singapore	Jan 2019 – Jun 2020
<i>Master of IT in Business</i> in Artificial Intelligence	
University of Southern California , Los Angeles, USA	Jan 2015 – Dec 2016
<i>Master of Science</i> in Mechanical Engineering	
Huazhong Agricultural University , Hubei, China	Sep 2010 – Jun 2014
<i>Bachelor of Engineering</i> in Mechatronics Engineering	

👤 EXPERIENCE

Huawei Noah's Ark Lab , Singapore	Jan 2025 – Present
<i>Research Intern</i>	
<ul style="list-style-type: none">• Researched Retrieval-Augmented Generation (RAG) and GraphRAG techniques for enhancing LLM applications• Developed graph-based indexing strategies and knowledge graph integration for context-aware retrieval• Evaluated and benchmarked RAG implementations for efficiency and response accuracy	
Fujitsu-SMU Urban Computing and Engineering (UNiCEN) Corp. Lab , Singapore	May 2019 – Sep 2020
<i>Graduate Student</i>	
<ul style="list-style-type: none">• Developed hybrid algorithms using Fujitsu Digital Annealer for large-scale scheduling and routing optimization• Designed novel decomposition methods for complex flow shop and job shop problems• Achieved superior performance with reduced computation time compared to traditional heuristics	

📖 PUBLICATION

- **Quantizing Text-attributed Graphs for Semantic-Structural Integration**
Jianyuan Bo, Hao Wu, and Yuan Fang
Under Review, 2025
- **CORE: Contrastive Masked Feature Reconstruction on Graphs**
Jianyuan Bo and Yuan Fang
Under Review, 2025
- **Contrastive General Graph Matching with Adaptive Augmentation Sampling**
Jianyuan Bo and Yuan Fang
International Joint Conference on Artificial Intelligence (IJCAI), 2024
- **A Survey of Few-Shot Learning on Graphs: from Meta-learning to Pre-training and Prompting**
Xingtong Yu, Yuan Fang, Zemin Liu, Yuxia Wu, Zhihao Wen, **Jianyuan Bo**, Xinming Zhang and Steven C.H. Hoi
Preprint, 2024
- **Techniques to Enhance a QUBO solver for Permutation-based Combinatorial Optimization**
Siong Thyé Goh, **Jianyuan Bo**, Sabrish Gopalakrishnan, and Hoong Chuin Lau
Genetic and Evolutionary Computation Conference (GECCO), 2022

⚙️ SKILLS

- Programming Languages: Python > Java > C++
- Software: Pytorch, TensorFlow, Keras, MATLAB, CPLEX
- Language: English, Mandarin

💖 HONORS AND AWARDS

- **Fujitsu-SMU UNiCEN Scholarship** (2019 – 2020)
Outstanding academic performance and research potential
- **Dean's List**, School of Computing and Information Systems (2019 – 2020)

📁 MISCELLANEOUS

- Singapore Permanent Resident
- Website: <https://www.bojianyuan.com/>
- GitHub: <https://github.com/jybosg>