BU, Fanchen 卜凡辰

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Education

PhD   *Korea Advanced Institute of Science and Technology (KAIST)*

Electrical Engineering   *2022.03 - Now*

Data Mining Lab (Supervisor: Prof. Shin, Kijung)

Master   *Korea Advanced Institute of Science and Technology (KAIST)*

Electrical Engineering, GPA: 4.21/4.30   *2019.09 - 2021.08*

Control Lab (Supervisor: Prof. Chang, Dong Eui)

Thesis: A Novel Optimization Algorithm with Orthogonality for Deep Neural Networks Inspired by Feedback Integrators

Bachelor   *University of Chinese Academy of Sciences (UCAS)*

Computer Science and Technology, GPA: 3.71/4.00   *2015.09 - 2019.08*

Supervisor: Prof. Zhao, Dongbin

Thesis: Vehicle Trajectory Prediction Based on Deep Learning

Publications

[C8]   Sunwoo Kim, Shinhwan Kang, **Fanchen Bu**, Soo Yong Lee, Jaemin Yoo, and Kijung Shin. "HypeBoy: Generative Self-Supervised Representation Learning on Hypergraphs." ICLR 2024.

[C7]   Hyeonsoo Jo, **Fanchen Bu**, and Kijung Shin. "Robust Graph Clustering via Meta Weighting for Noisy Graphs." CIKM 2023.

[C6]   **Fanchen Bu** and Kijung Shin. "On Improving the Cohesiveness of Graphs by Merging Nodes: Formulation, Analysis, and Algorithms." KDD 2023.

[C5]   Sunwoo Kim, **Fanchen Bu**, Minyoung Choe, Jaemin Yoo, and Kijung Shin. "How Transitive Are Real-World Group Interactions? - Measurement and Reproduction." KDD 2023.

[J2]   **Fanchen Bu**, Shinhwan Kang, and Kijung Shin. "Interplay between Topology and Edge Weights in Real-World Graphs." Data Mining and Knowledge Discovery 2023 (ECML PKDD 2023 Journal Track).

[C4]   Soo Yong Lee, **Fanchen Bu**, Jaemin Yoo, and Kijung Shin. "Towards Deep Attention in Graph Neural Networks: Problems and Remedies." ICML 2023.

[C3]   Hyunju Kim, Jihoon Ko, **Fanchen Bu**, and Shin Kijung. "Characterization of Simplicial Complexes by Counting Simplets Beyond Four Nodes." TheWebConf (fka WWW) 2023.

[J1]   **Fanchen Bu**, Geon Lee, and Kijung Shin. "Hypercore Decomposition for Non-Fragile Hyperedges: Concepts, Algorithms, Observations, and Applications." Data Mining and Knowledge Discovery 2023 (ECML PKDD 2023 Journal Track).

[C2]   **Fanchen Bu** and Dong Eui Chang. "Double prioritized state recycled experience replay." ICCE-Asia 2020.

[C1]   **Fanchen Bu** and Dong Eui Chang. "Feedback gradient descent: Efficient and stable optimization with orthogonality for DNNs." AAAI 2022.

Services

KDD Reviewer   2024

Languages

Chinese	Native (Native: Mandarin, Wu Chinese; Intermediate: Cantonese; Elementary: Hokkien)
English	Advanced (IELTS 7.5; GRE 333)
Korean	Intermediate