

Gestalt-GNN: A Novel Approach to Enhance AI Decision Interpretability

Anne Sinko*, Srikanth Vemula, College of Saint Benedict and Saint John's University

In the realm of artificial intelligence, explainability has become increasingly crucial, as AI systems influence critical decisions in fields such as healthcare and finance. Current methods for explaining AI decisions often focus on pixel-level analysis or feature importance, which can be difficult for nonexperts to interpret. This talk introduces an innovative approach that integrates graph neural networks (GNNs) with Gestalt principles to enhance the understandability of AI explanations. Gestalt principles, such as proximity, similarity, and closure, offer a framework for how humans naturally perceive and group visual information. By aligning AI explanations with these principles, and using graphs as the underlying structure, results become more intuitive and coherent.

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