



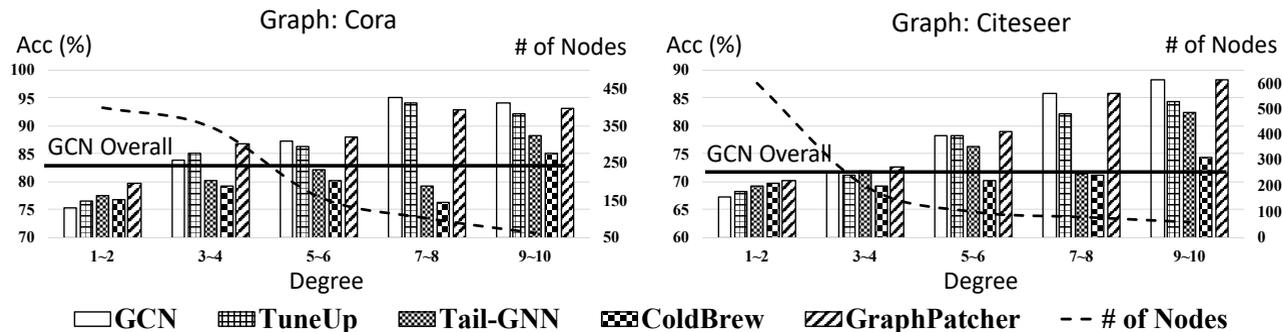
GraphPatcher: Mitigating Degree Bias for Graph Neural Networks via Test-time Augmentation

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Research Question Node Degree vs. Accuracy across SoTA



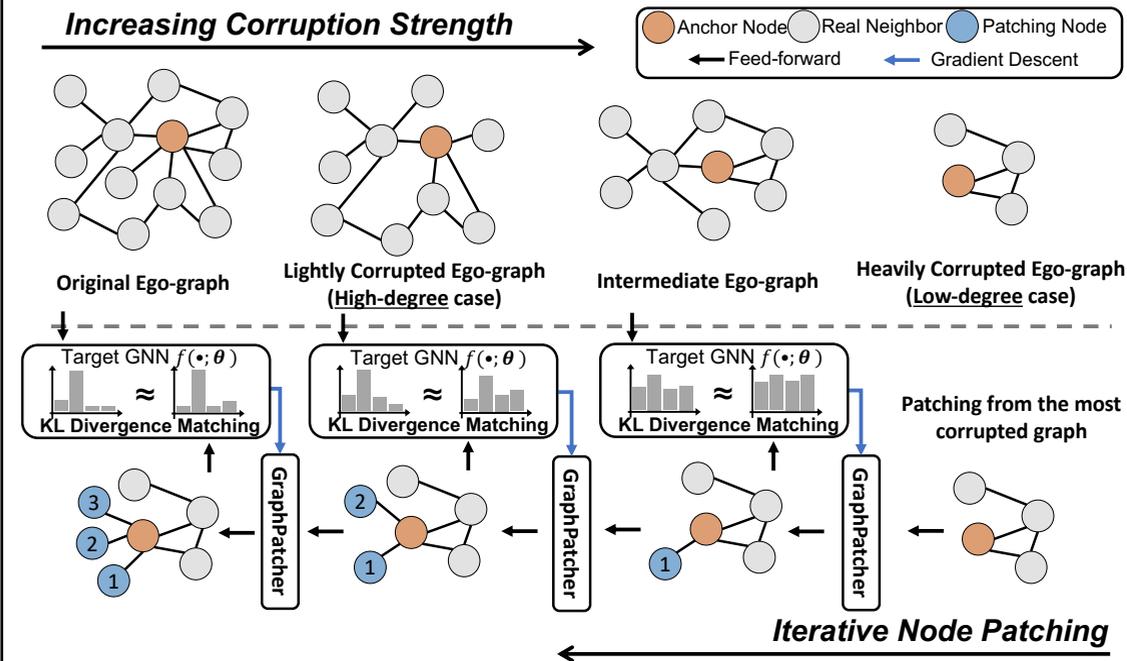
Regular GNNs: low-degree < high-degree

A well-studied bias: GNNs perform better for high-degree nodes.

Low-degree-enhanced GNNs: low-degree > high-degree

New bias: low-degree improves, yet high-degree suffers

The proposed method: GraphPatcher



Low-degree Performance

Method/Data	Cora	Citeseer	Pubmed
GCN	73.27	64.86	76.88
ColdBrew	73.82	65.60	77.72
Tail-GNN	71.17	57.66	75.38
GraphPatcher	78.08	67.27	78.98

Overall Performance

Method/Data	Cora	Citeseer	Pubmed
GCN	81.22	70.51	79.14
ColdBrew	80.70	70.10	78.66
Tail-GNN	79.44	65.80	79.91
GraphPatcher	84.17	71.65	81.13

Paper



Code

