GNN Assignment: Node Classification with GCN Introduce students to the concept of learning on graphs by building and training a simple GCN to classify academic papers in a citation network dataset (Cora).

Dataset Cora citation dataset (built-in with PyTorch Geometric or DGL)- Nodes: research papers- Edges: citations between papers- Labels: subject area of each paper (e.g., NLP, Robotics)

Learning Outcomes- Understand graph data (nodes, edges, features)- Learn to use GCN layers for node classification- Work with PyTorch Geometric or DGL- Visualize embeddings and training performance

Tasks to Complete 1. Load Dataset 2. Preprocess Graph 3. Build the GCN Model 4. Train the Model 5. Evaluate 6. Visualize Embeddings (Bonus)

Recommended Tools- Python- PyTorch & PyTorch Geometric- matplotlib / seaborn for visualization.