Search Task:
 The task is to choose the best GNN architecture on a given dataset.

Search Space:
 A GNN architecture is defined as follows: ....
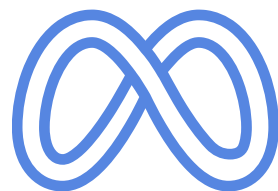 There are 9 operations that can be selected:
  GAT, GCN, GIN, GraphSAGE......

Search Strategy:
 At the beginning, use **the exploration strategy** to explore the operations......
 When a certain amount of evaluated architectures are available, use **the exploitation strategy** to ......

GNAS Prompt

LLMs

Model:
Model1: [FC,GAT,GCN,k-GNN]
Model2: [GCN,GIN,k-GNN,ARMA]
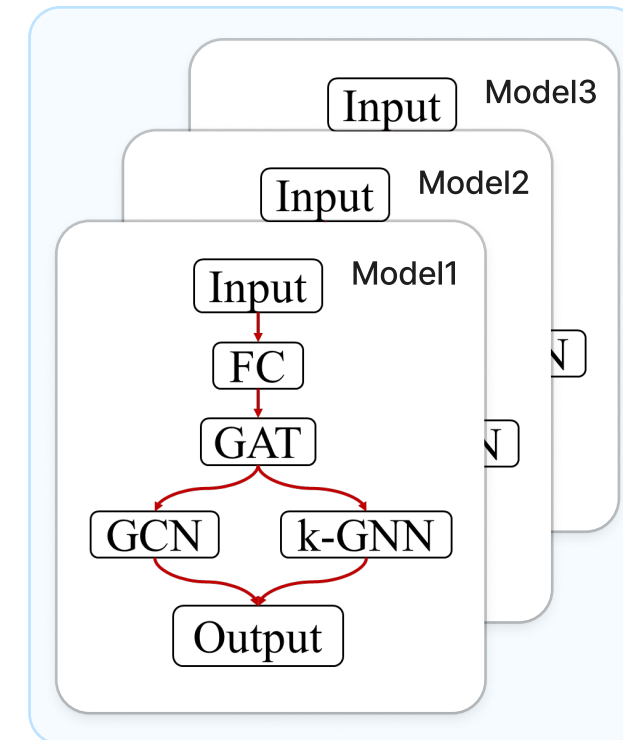Model3: [GCN,Cheb,SAGE,GAT]
 ......

GNN Models

Feedback:
Model1 gives an accuracy of 80.93%
Model2 gives an accuracy of 81.07%
Model3 gives an accuracy of 79.73%
 ......

Feedback Prompt

Model3
Model2
Input
Input
Input   Model1
FC
GAT
GCN   k-GNN
Output

Model Evaluation