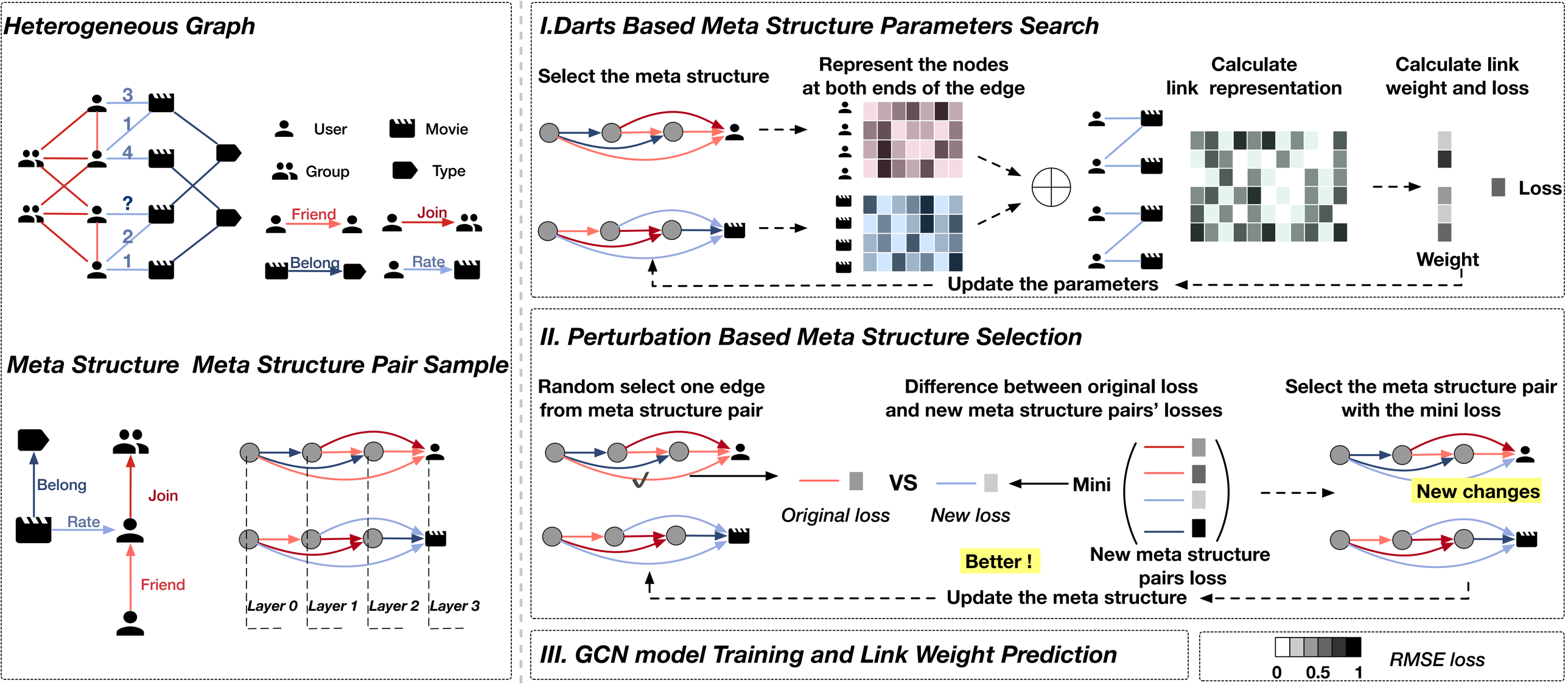
Heterogeneous Graph
3
1
4
?
2
1
User
Movie
Group
Type
Friend
Join
Belong
Rate
Meta Structure
Meta Structure Pair Sample
Belong
Rate
Join
Friend
Layer 0
Layer 1
Layer 2
Layer 3
I.Darts Based Meta Structure Parameters Search
Select the meta structure
Represent the nodes at both ends of the edge
Calculate link representation
Calculate link weight and loss
Loss
Weight
Update the parameters
II. Perturbation Based Meta Structure Selection
Random select one edge from meta structure pair
Difference between original loss and new meta structure pairs' losses
Select the meta structure pair with the mini loss
Original loss
VS
New loss
Mini
Better !
New meta structure pairs loss
New changes
Update the meta structure
III. GCN model Training and Link Weight Prediction
0
0.5
1
RMSE loss