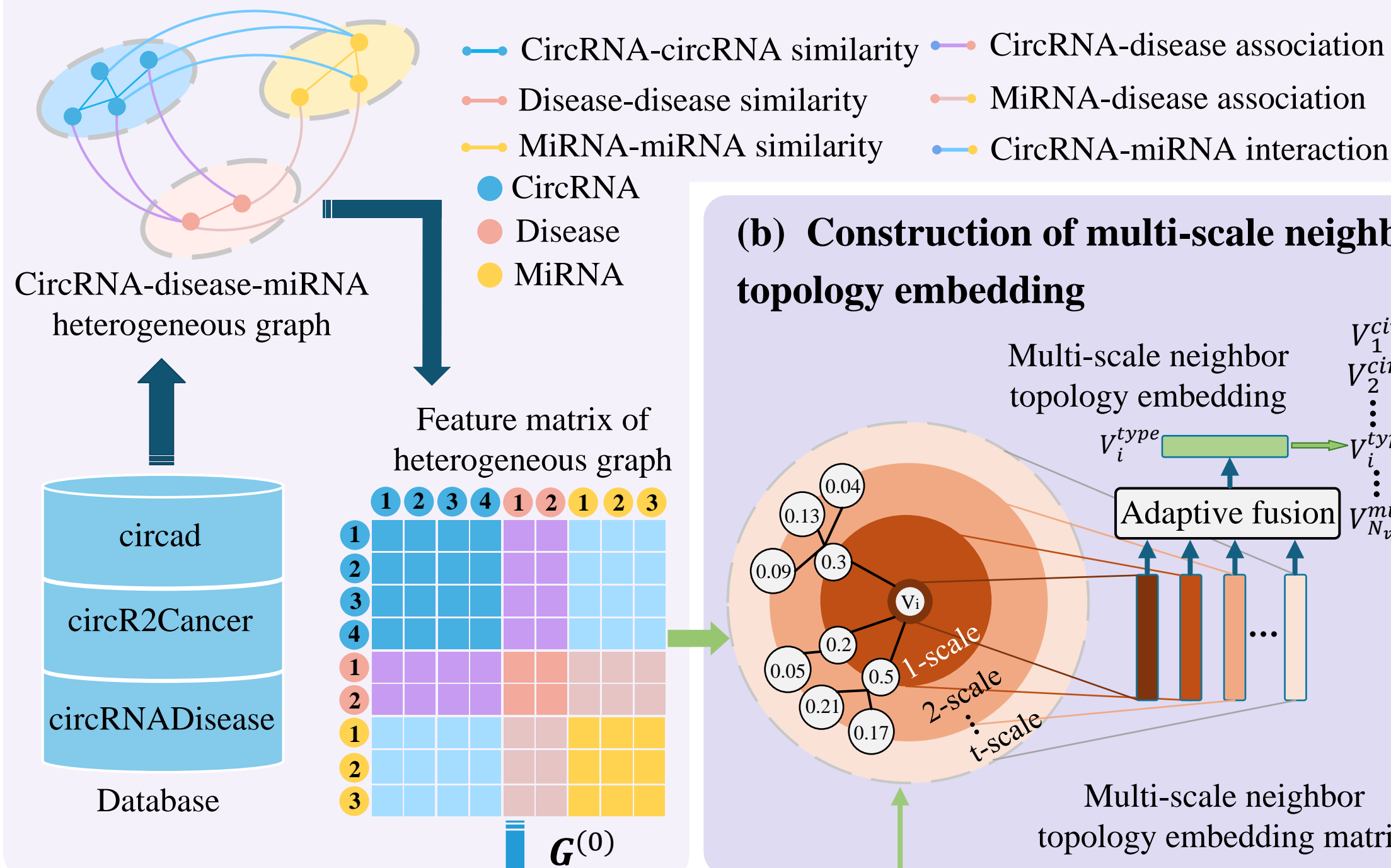
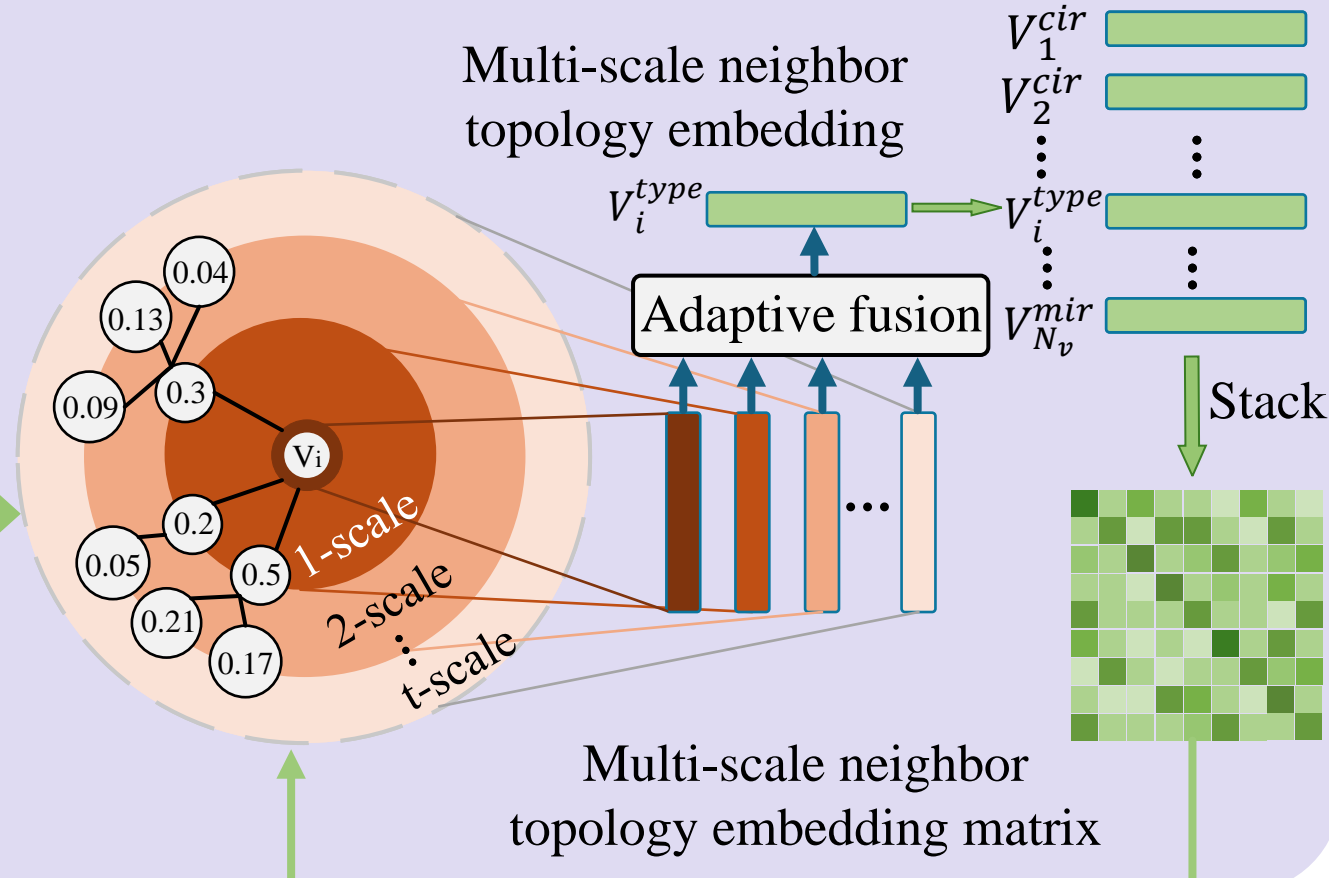


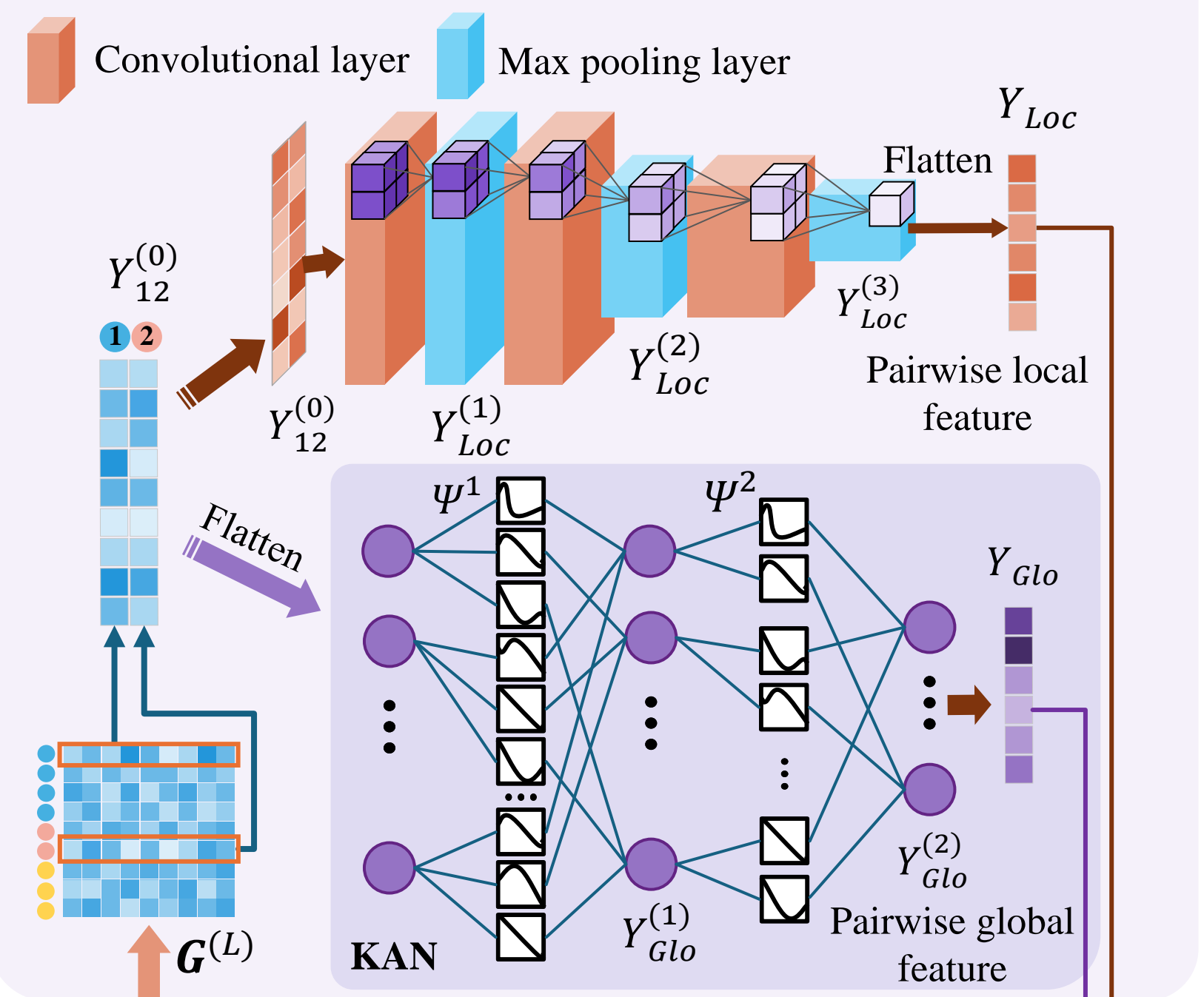
(a) Construction of circRNA-disease-miRNA heterogeneous graph



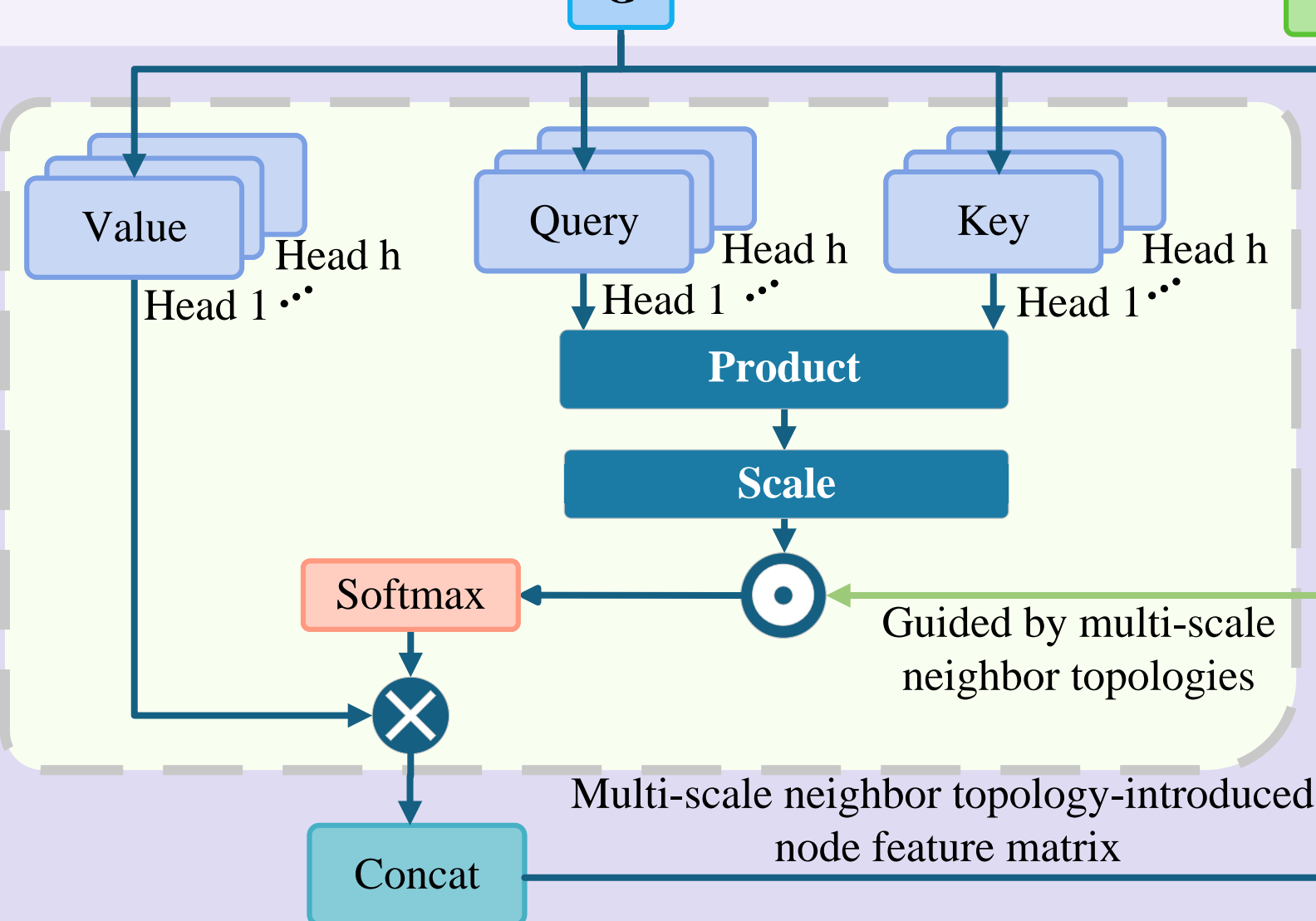
(b) Construction of multi-scale neighbor topology embedding



(e) Adaptive KAN and CNN combination for enhanced pairwise feature learning

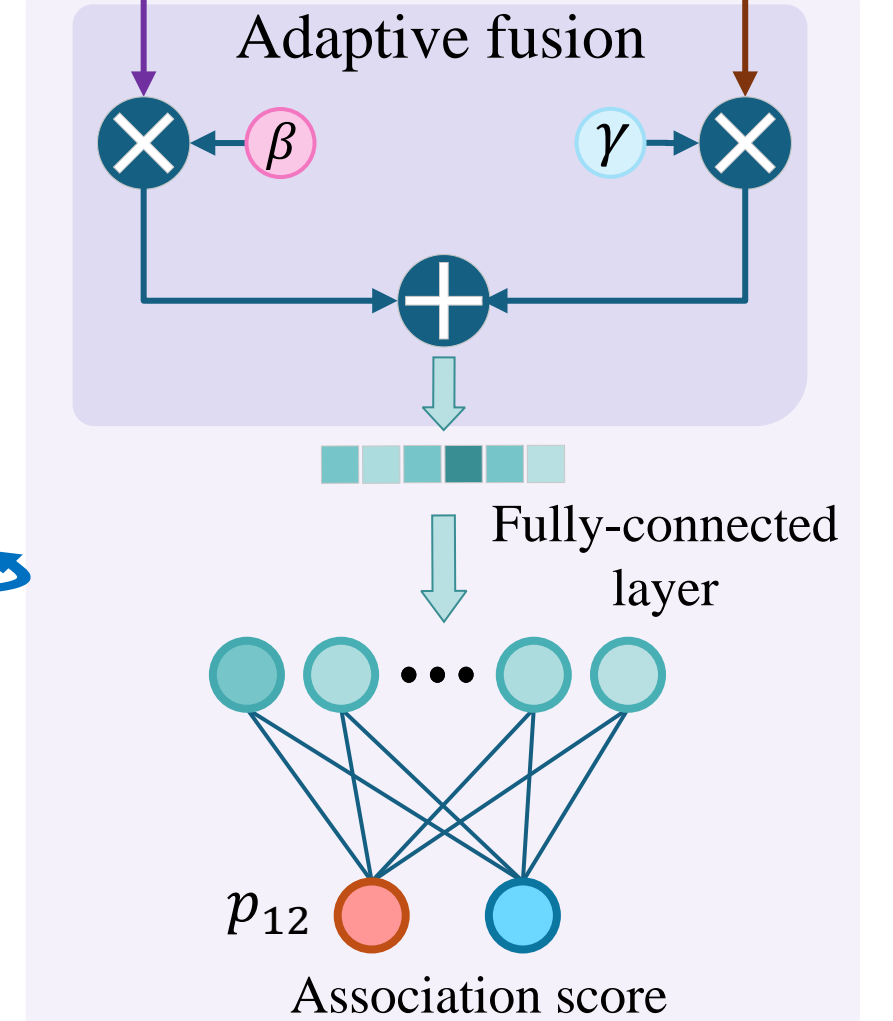
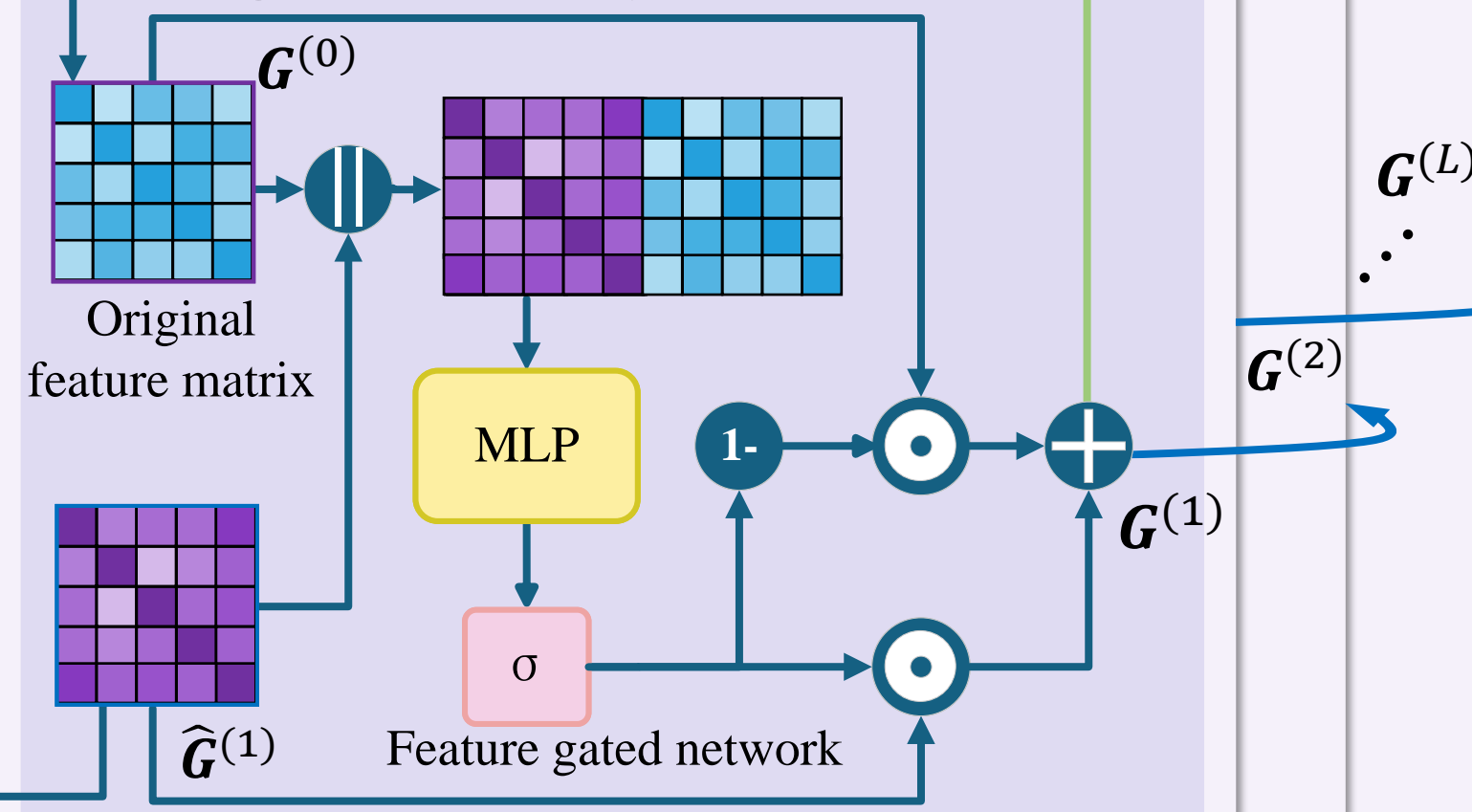


Graph feature matrix G



(c) Node feature learning by DMTT

(d) Fusion of topological and original feature by FGN



(f) Association score evaluation