Step 1: Weighted Directed Graph Construction

QA Pairs

Questions
What is the most common type of anemia? ...

Query

Answers
Vitamin-D.
Drawin. ...

Label

Expert labeling

Embeddings

Latent Space

$d \times m$

$m \times m$

Hidden States

Attention Maps

Vec2Graph Labels

Weighted Directed Graphs with Labels

...

Train
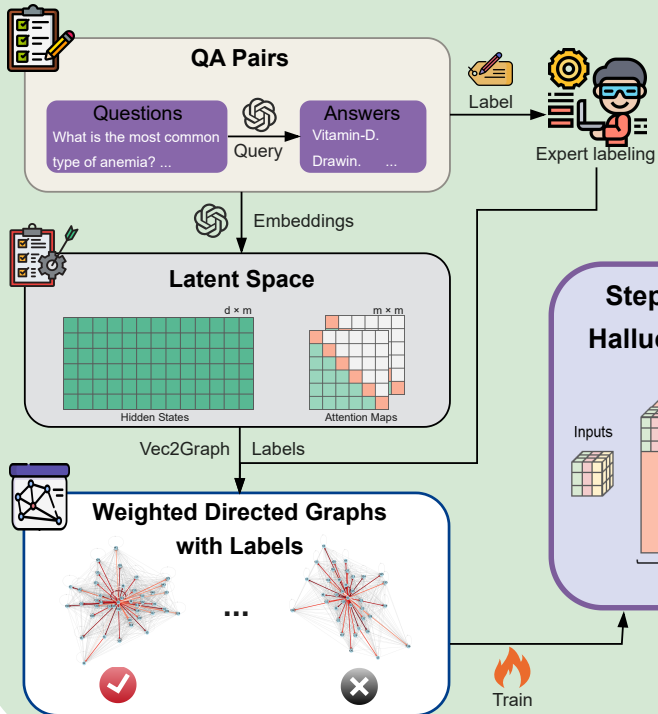
Step 2: GNN-based Hallucination Detector

Inputs

Outputs

GraphConv   FCN
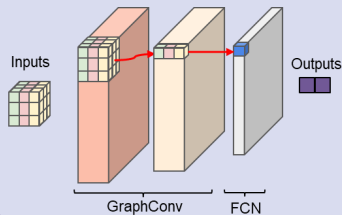
Step 3: Real-time Hallucination Detection

How will global warming eliminate some islands and reduce the area of others?

Query

Raise sea levels.

Embeddings

Graph

Test

Latent Space

Hidden states

Attention maps

Vec2Graph

Output: Fact

Explain

Interpretability

tSNE