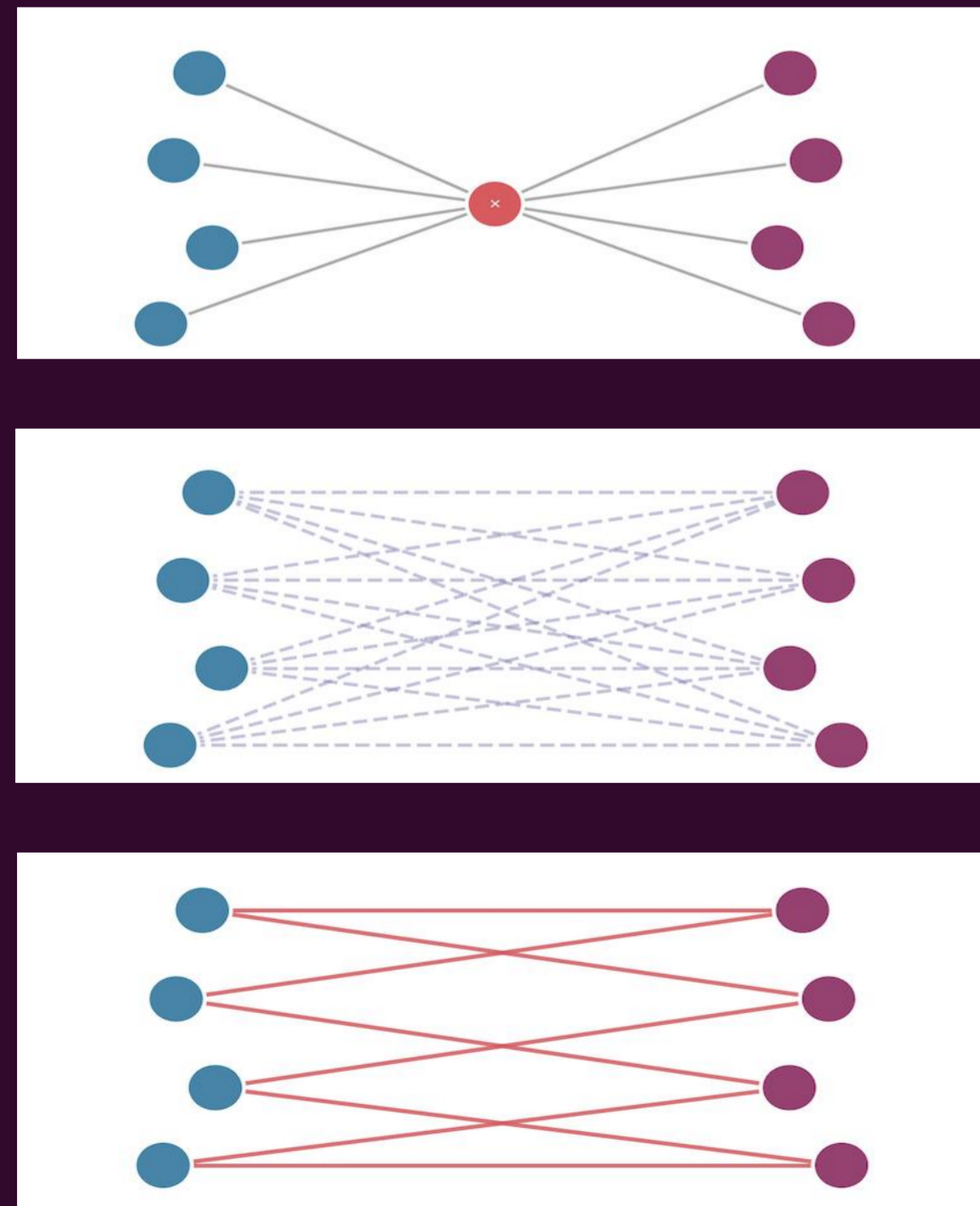
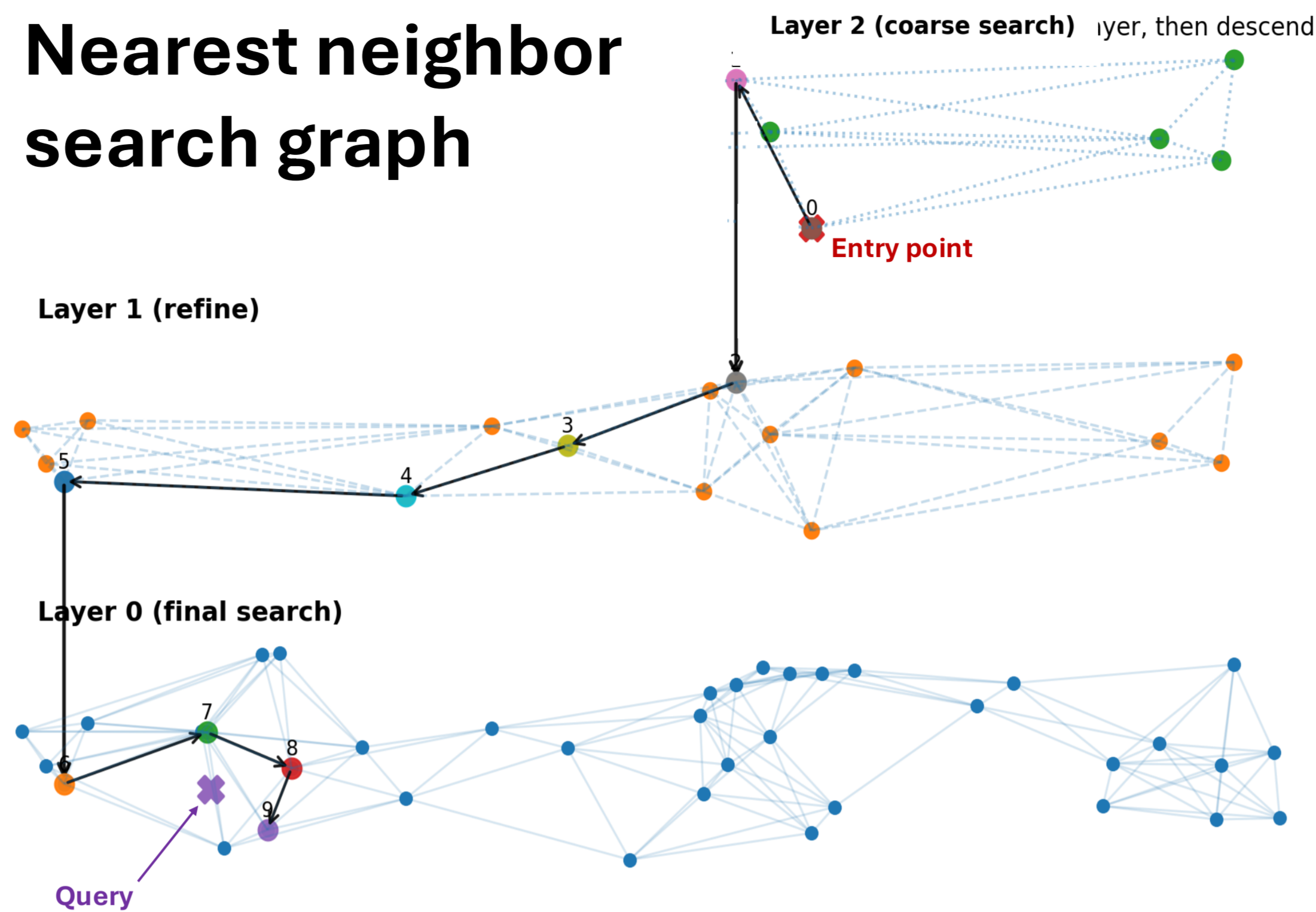


# How to delete from a nearest neighbor search graph while preserving connectivity?

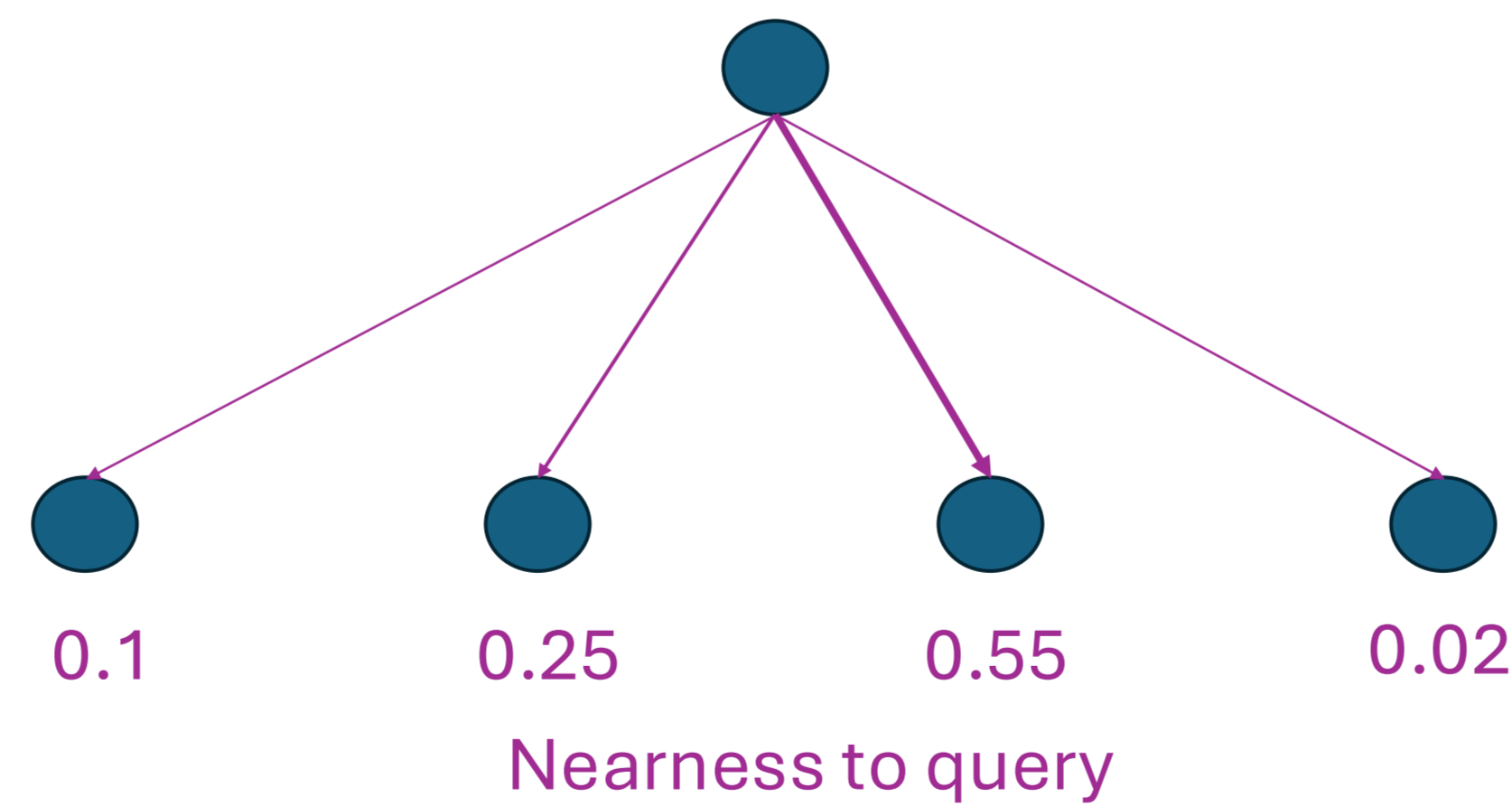
Our method: SPatch



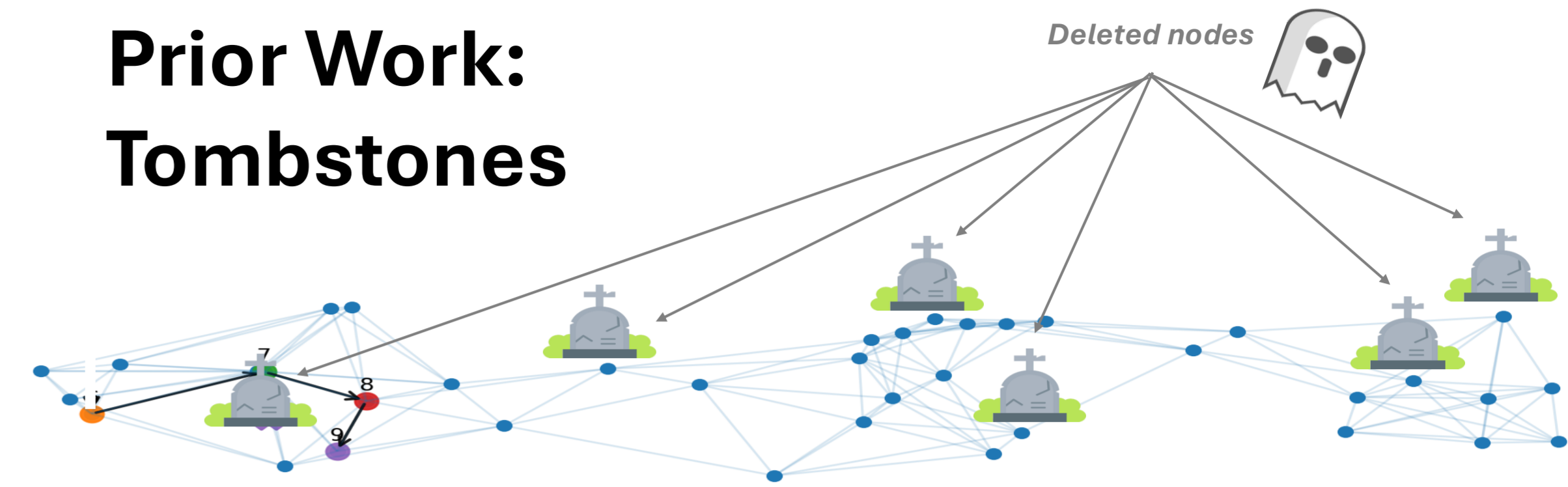
## Nearest neighbor search graph



Approach: greedy  $\rightarrow$  softmax walk

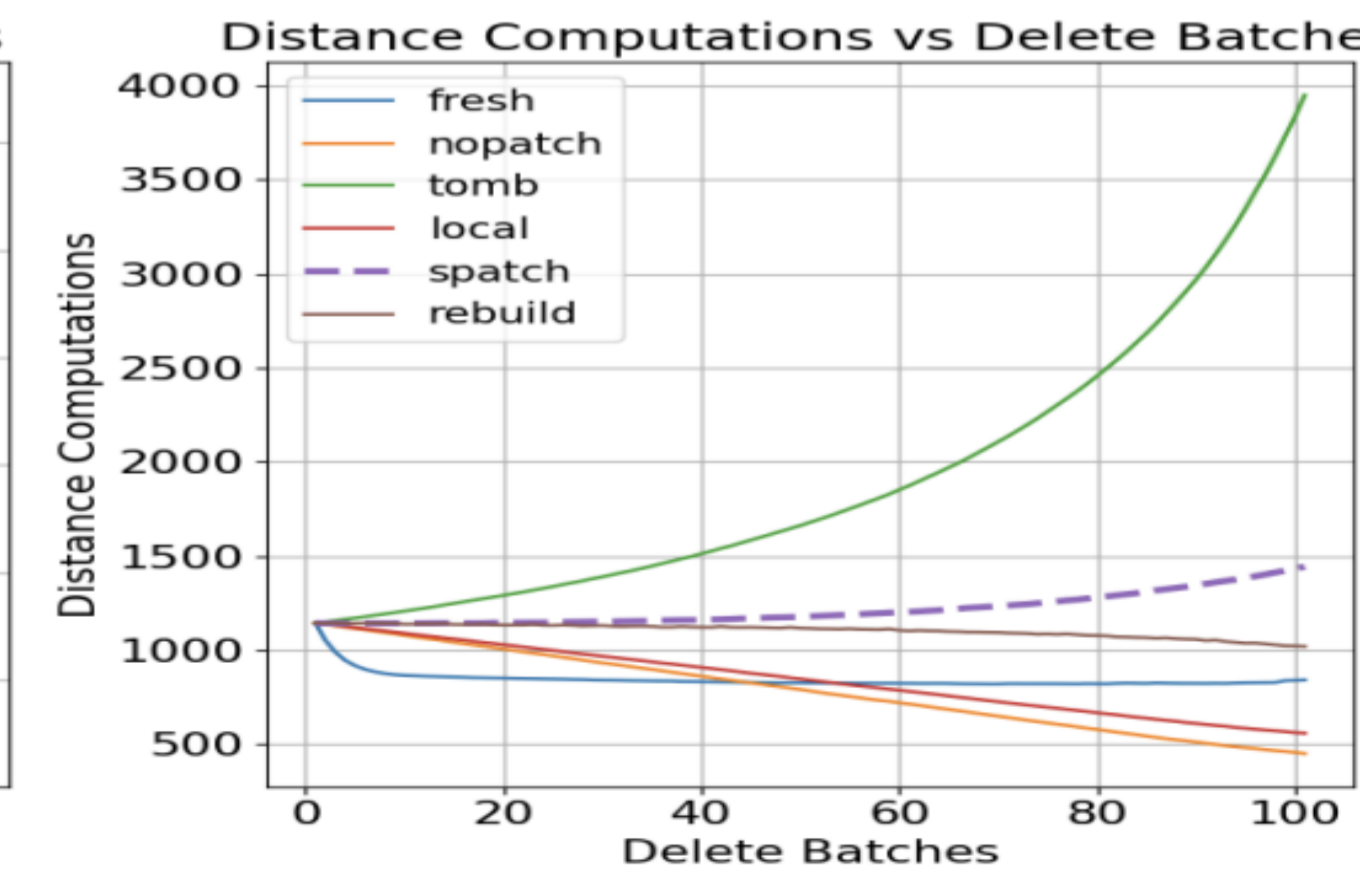
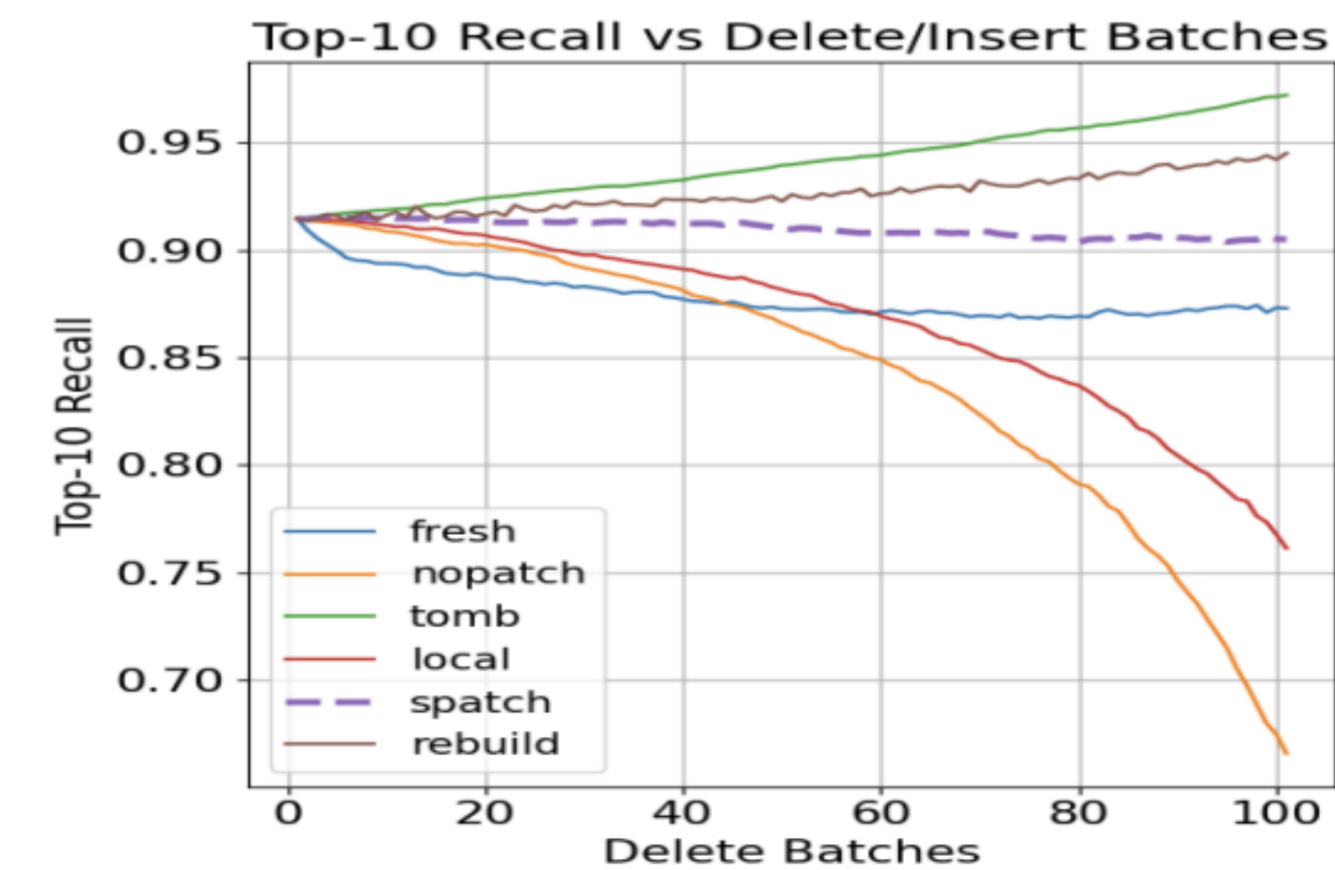


## Prior Work: Tombstones



## Experiments

Method	Recall	Speed	Del Time	Space
Tombstone	✓	✗	✓	✗
No patch	✗	✓	✓	✓
Local	✗	✓	✓	✓
FreshDiskANN	✓	✓	✗	✓
Global	✓	✓	✗	✓
SPatch (ours)	✓	✓	✓	✓



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