

Unified Search Engine

Real-time
Range Query

Real-time
kNN Query

Historical
Range Query

Similarity
Search



Incoming Points

pid	x	y	t	tid
...				
		...		
				...

Posting Lists

TP-List

TIP-List

GT-List

TC-List

CT-List

CP-List

Global Encoding Engine

Encoder

Grid
Mapping

(2D)Zorder

gid

Cube
Mapping

Day
+
(3D)Zorder
+
Level

cid

Hybrid Storage Engine

Adjacency Compaction

Disk Run

Disk Run

Disk Level: L_2

Disk Run

Disk Run

Disk Level: L_1

Mem Run

Mem Run

MemBuffer