

Supplementary Material HIVE: Hyperbolic Interactive Visualization Explorer for Representation Learning

1 Survey Outline

To evaluate user perceptions of HIVE, we designed a 15-item survey covering central aspects of the tool. Each item corresponds to one of four evaluation dimensions: Usefulness (U), Quality of Visualization (V), User Experience (E), and Open-ended feedback (O). All closed-form responses were collected using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Item	Survey Question	Metric
1	The tool is useful for understanding and analyzing hyperbolic embeddings in my research.	U
2	Using HIVE would improve the efficiency of my current workflow.	U
3	HIVE offers functionality that traditional static plots do not provide.	U
4	I would use HIVE regularly if it were available.	U
5	The visualizations (e.g., Poincaré disk, hierarchical graph) are clear, informative, and easy to interpret.	V
6	The hierarchical graph in the right panel effectively reveals the underlying structure of the data.	V
7	Graph edges within the disk are clearly and intuitively displayed.	V
8	The distinction between graph and embedding views is visually clear.	V
9	The interface is intuitive and pleasant to use for interactive exploration.	E
10	Controls (zoom, selection, interpolation) are easy to learn.	E
11	The system responds quickly enough for smooth interaction.	E
12	Overall, I am satisfied with my experience using HIVE.	E
13	What features did you find most valuable and why?	O
14	What features are currently missing in HIVE?	O
15	Any additional comments or suggestions.	O

Table 1: Survey items targeting the key evaluation dimensions. All closed-form responses were collected using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).