Summary
Apolo is a system that uses a mixed-initiative approach — combining visualization, rich user interaction and machine learning — to guide the user to incrementally and interactively explore large million-node graphs in real time. Here, we use a citation network as the example data.

Find Relevant Nodes with Exemplars.
The user specifies nodes of interest as exemplars, and Apolo computes other nodes' relevance, using the Belief Propagation machine learning algorithm that "spreads" relevance from the exemplars. The more relevance a node receives, the more relevant it is.

Create & Modify Groups.
Organize your representation about the data visually and interactively. Apolo supports groups, and you can spatially arrange them any way you want. What's more — each group can have its own exemplars. They enable Apolo to find relevant nodes for all groups at the same time.

Cognitive, Visual & Algorithmic Scalability.
Visualizing the full million-node graph is rarely useful. Apolo finds and visualizes a small set of the most relevant nodes and edges. When you are ready for more, ask Apolo to show it. Apolo's scalable algorithm processes millions of nodes and edges in real time.

Evaluation
In a between-subjects study, 12 participants used Apolo and Google Scholar to find relevant new papers to update two sections of an existing survey paper. Two expert judges rated papers found by Apolo to be statistically significantly more relevant. Subjective feedback of Apolo was also positive.