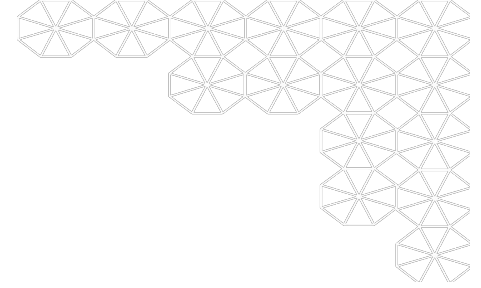


Building upon SeeDB

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Academic Research Presentation – 09/12



Summary

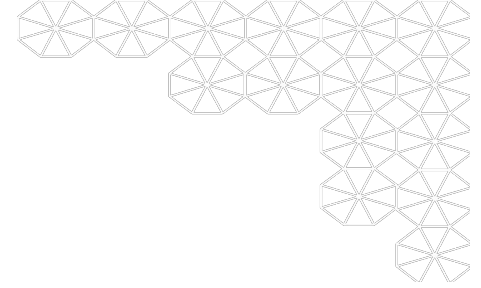
1. We know that visualization is a crucial component of data analysis: SeeDB helps users comprehend complex patterns, relationships, and anomalies in the data by finding **meaningful visualizations faster**.
2. Addresses 3 main challenges faced in current systems:
 - a. Generates few **interesting (deviation-based utility)** visualizations rather than thousands of them (with no utility value)
 - b. Avoids repeated computations and saves resources and time. Does these by two main techniques
 - i. **Sharing** Optimizations
 - ii. **Pruning** Optimizations
 - c. Generates visualizations at interactive speed.

Personalized Recommendation System



1. **User Feedback Loop:** Introduce a mechanism where users can upvote, downvote, or provide feedback on the relevance of the recommended visualizations.
2. Build user profiles/ personas and learn from them.
3. Incorporate historical data into recommendations
4. User data-driven insights along with SEEDB's deviation-based utility calculation

Aesthetics enhancement



1. **Integrate with external design tools** like Adobe Illustrator or D3.js to allow users to export their visualizations
2. Provide an **aesthetics template library** from which user can choose based on their data type or personal preferences.
3. **Improve interactivity:** Zoom and pan, transition effects
4. **Feedback Loop** for aesthetics: color palette, font, markers, etc.