

## **Looking Forward**

- Lots of research issues on pattern discovery are still waiting to be solved
- Application exploration: Invisible Pattern Mining (i.e., built into various search, ranking, mining and other functional units)
  - Discriminative-pattern-based classification
  - Indexing and retrieval (e.g., graph indexing and similarity search)
  - Text mining: Phrase mining and topic modeling
  - Software bug mining and mining software specifications
  - Spatiotemporal and trajectory data mining
  - Image and multimedia data mining
  - Biological and chemical data analysis: DNA, graphs
  - Subspace clustering (to be covered in Clustering in Data Mining)
  - Web logs → Click stream patterns → Recommendation