Research Objectives:
The goal is to develop effective methods to improve the performance of frequent and important queries using materialized views. The expected outcomes are efficient and scalable algorithms that design (near-) optimal sets of views for the queries.

Approach:
The project has two parts: (1) theoretical analysis and design of algorithms and heuristics for view design, and (2) implementation and experiments on large databases, to evaluate the performance improvements caused by using the views.

Broader Impact:
The outcomes of this project could improve the efficiency of user interactions with data-management systems. Solving the problem will have the most effect in query optimization, data warehousing, and information integration.