objectives

前言：

海量数据查询的低效率，缺乏统一的数据规范，以及支持数据的时空特性的缺点是需要解决的严重问题。在本项目中，我们需要对具有时间属性或者空间属性的数据进行分析，在获得的结果中提取出所需要的数据片段，并进行数据的预测、比对之后得出相关结论。

Low efficiency in massive data query, lack of unified data specification, and short in supporting space-time property of data are serious problems to be solved today. In this project, we need to analyze data with space or time characteristics. And use the result to extracts the needed data pieces from the huge amount of data. At last we use the obtained results for projections, comparison and draw the relevant conclusions.

Innovation and project characteristics:

There are four aspects of innovation in our project:

1. Data storage：

Storing data with classification tag

Storing the underlying data with NoSQL database

2. Analyze：  
Analyzing the data with Bernstein- Bézier curve

Fitting the treated data to correlation function

Avoiding traversal algorithm

Using parallel computing to improve optimization data query

3. Data search

Using the idea of feature extraction and pattern recognition to find pieces of data

Where can we use the result we obtained?

1. Optimizing data query

2. Helpful for the data projection

3. Helpful for the data comparison