AIDA: Adaptive Immersive Data Analyzer

IM- Adaptive Immersive Data Analyzer (AIDA)

AIDA (Adaptive Immersive Data Analyzer) is an adaptive application for querying and analyzing the data generated by an immersive environment. By focusing on off-line queries over immersive data sets, it supports a wide range of complex queries from knowledge discovery to spatio-temporal queries. AIDA's database schema design and efficient query sets are common for general immersive environments. This demonstration provides a prototype suitable for the design and development of domain-specific query and analysis applications on the users' interactions with the corresponding immersive environment. AIDA has implemented a set of application-specific queries for Immersive Classroom application (IC).

With AIDA, we proved the effectiveness of our process of identifying the different types of data pertaining to immersive environments, applying the appropriate data model to conceptualize this data and finally implementing the data analyzer that incorporates different classes of general-purpose and application-specific queries over immersive data sets.
### UNIQUE OR DISTINGUISHING CHARACTERISTICS RELATIVE TO STATE-OF-THE-ART

- Spatio-temporal query analysis and visualization

### APPLICATIONS

- Analysis and visualization of data received from any Immersive Environment, specifically from Immersive Classroom

### RECENT HIGHLIGHTS, LEVEL OF DEVELOPMENT, UPCOMING MILESTONES

- Development: Implemented in Java, using JDBC protocol for connecting to the underneath OR-DBMS.
- Upcoming Milestone: Support very complex and efficient queries on multidimensional and bulky data received from an Immersive Environment.

### UNDERLYING TECHNOLOGIES

- AIMS: An Immersidata Management System
- Real-Time Pattern Isolation And Recognition Over Immersive Sensor Data Streams
- Spatio-temporal database technology

### LIST OF PUBLICATIONS, REFERENCES, URLs

  - http://infolab.usc.edu

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