Immersidata Mining

A NATIONAL SCIENCE FOUNDATION
ENGINEERING RESEARCH CENTER

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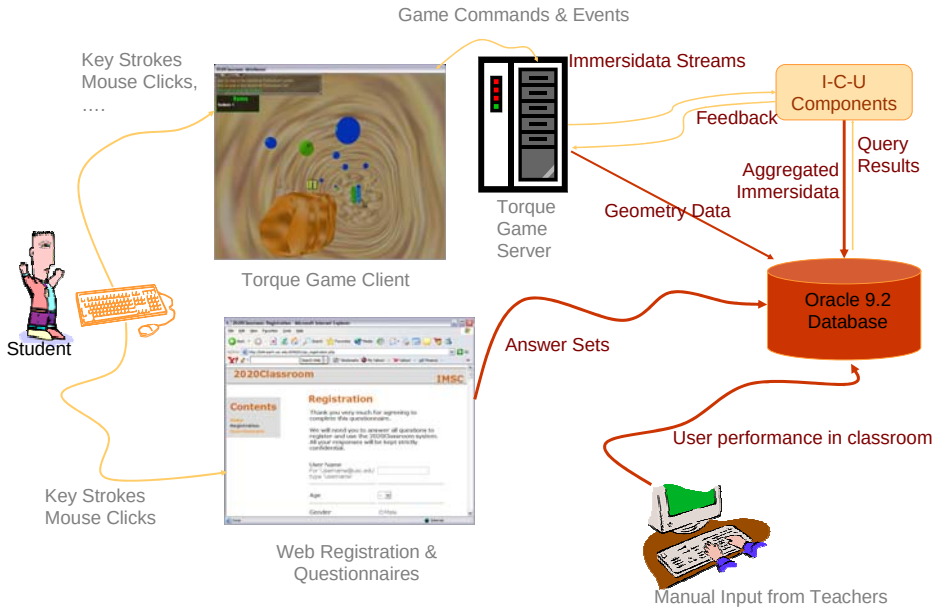
Research Goal

Immersidata Mining: Customize environment towards students' preferences
Evaluate students' performances
Evaluate the effectiveness of curriculum and/or environment

Role in IMSC

This technique will customize the immersive environment of a classroom, while students are interacting with the 2020Classroom application and also help the teacher to design the curriculum specifically tailored for this immersive environment.



Uniqueness

Data types: traditional data, spatio-temporal data, and immersidata over un-synchronized streams
Application: educational distributed environment game systems w/ full-blown database backend
Involved from the beginning in content generation, game design and game algorithms
Seamless interaction between query engine and game engine

Accomplishments

Publication: "k Nearest Neighbor Searches on Multivariate Time Series" submitted to Machine Learning Journal.
Implement exemplary online queries for the 2020Classroom application to provide feedback to users.

5-Year Plan

Build a unified framework and model for more general user behaviors
Design a learning model that can locate the most fitted similarity measure based on data characteristics