Novel Design Technique For Domain-Specific Computational Interfaces

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Abstract

The objective of this project is to interpret large quantities of information through the use of tangible interfaces, in such a way that scientists and the general public can comprehend and ask questions of complex data sets. We have attempted to realize this objective by modifying and adapting existing tangible interaction systems to perform new functions. Specifically, we used the Apple iPad as a test platform, and tangibles as physical interactive representations of digital data. The Chromosome Casier is one realization of this approach.

Domain-Specific: Football

Individuals from different disciplines of the technology field have different views on how information could best be manipulated. Flourishing real estate in circuit boards and the concept of modularity provide a possible avenue for exploration of this issue. In my research I explored novel design techniques with controlled limited resources. The techniques I have learned to use provide evidence that my interfaces can be reproduced by even those who lack resources.

Future Work: Tarjeta Interfaz

In Nicaragua, I plan for applying an interface for the water transportation system. Throughout the day you would find water not running consistently. This is an inconvenience that should be accommodated for all humans. I plan on creating an interface that can easily inform citizens of when water will arrive in the case of occurring shortages. This will be valuable because everyone will be one-accurate, and lives will continue smoothly accordingly to schedule.

Future Work: Blue Waters

The creation of a Blue Waters interface is more than just an opportunity, it will be intriguing. Link one of the fastest computers in the world to a wireless interface for monitoring it's progress while not physically present. Thus you have an epidemic interface for scientist, and engineers. Ultimately this creation is a great way to welcome the underrepresented community of