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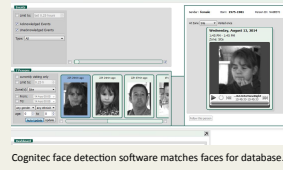
Cyberlaboratory: Building Infrastructure, Knowledge and Capacity in Informal Science Education Research



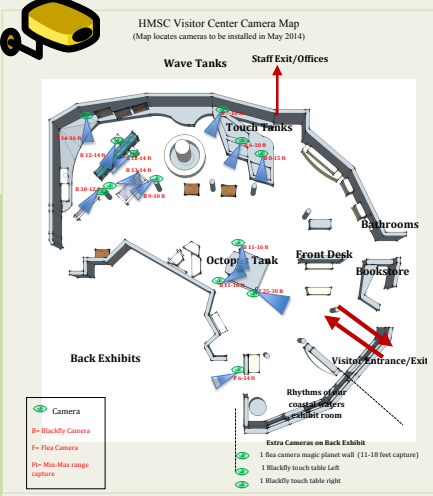
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1. Automated Data Collection Building technological Infrastructure for learning research



Cognitec face detection software matches faces for database.



Milestone video surveillance software allows researchers to fine-tune data collection.

Cyberlab represents a "social science" model of remote data collection. Oceanographers collect remote data from the ocean using satellites. Cyberlab collects remote data from a social learning setting through cutting edge video technology that goes beyond surveillance.

2. Research Platforms Building customized opportunities for learning research

Different research platforms using the underlying Cyberlab data collection system help answer fundamentally different research questions addressing the different nature and usability of the platforms themselves.



Interactive wave tanks allow for iterative build-and-test activities among family groups.



Touch tanks allow for research on interactions with live animals.



Multi-touch table allows for research on interactions with digital interfaces.

CHALLENGES OF A GLOBAL ERA PROJECT

Working with new technology means learning on the go. It takes time, effort and collaboration to customize the use of the tech tools

Retrofitting an existing facility to meet the needs of the data collection system and sharing the infrastructure with other projects

In order to collect reliable and innovative data we need reliable research platforms, which take time to build and intensive prototyping effort.

3. Cyberscholars Building knowledge and capacity for learning research

Cyberscholars are given the opportunity to explore new, technologically challenging methods to collect learning research data. In the process they become pioneer researchers in a global education era and contribute to building the knowledge necessary to use the tools of that era.



Up to 15 cyberscholars like Luisa Massarani work in residence to develop their own research to be carried out remotely at HMSC and in their home sites.