

BECOMING BUTTERFLIES

Interactive Embodiment of the Butterfly Lifecycle

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RESEARCH QUESTIONS

How can designers preserve the educational intent of a traditional **museum** exhibit while leveraging ubiquitous technologies to create an augmented and **full-bodied interaction**?

Which technologies can be used to **minimize cost** and **maximize portability** and **ease of upkeep** for museum staff?

BACKGROUND

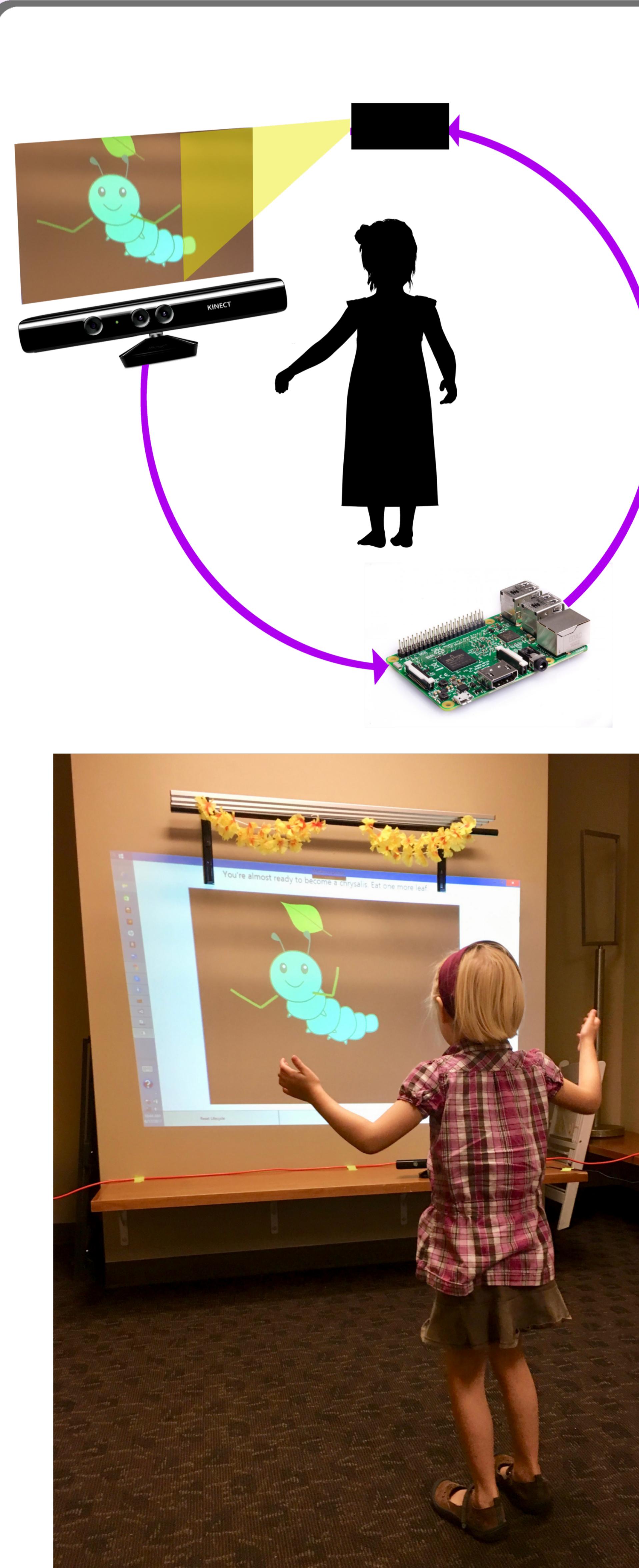
Becoming Butterflies is an exhibit in CU's Museum of Natural History. Its goal is to educate visitors about the butterfly lifecycle. Our project intended to serve as an interactive addition to the previously static exhibit.

MUSEUMS & TECH

Augmenting museum exhibits can:

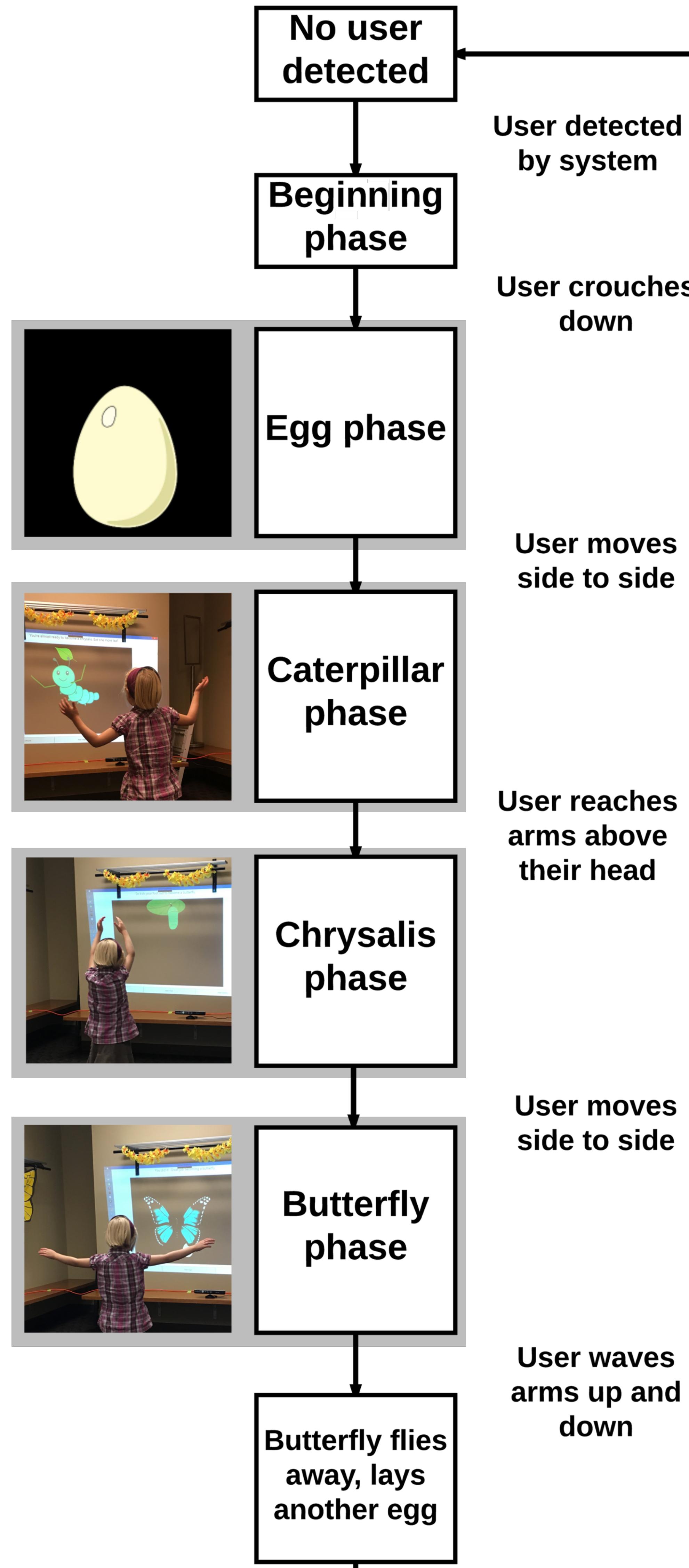
- **motivate** more people to visit [1]
- improve visitor **engagement, conversation, and playfulness** [2]
- better **educate** visitors through **experiential learning** [3]

INTERACTION PROCESS



A child interacting with our system, using her arms to direct the caterpillar to eat leaves.

START



RESULTS: FAMILY FUN DAY

We deployed our system at CU Family Fun Day's exposé of the *Becoming Butterflies* exhibition.

- children were **excited** to try it
- toddlers were **too small** to be tracked by the system
- different age groups required **tailored instructions** for max comprehension
- some children wanted to use the system **with a friend**

CONTRIBUTIONS

- Presents the use of full-bodied interaction for developing **interactive** museum exhibits without sacrificing **educational content**
- Demonstrates **low-cost** and **accessible** ubiquitous technologies that can be leveraged to facilitate experiential learning

ACKNOWLEDGMENTS

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