Fostering AI Literacy through Embodiment and Creativity across Informal Learning Spaces | 2214463

Community Partner:
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Project Description

We are investigating how embodied interaction and creative making can be leveraged to design museum exhibits to foster middle-schoolers' AI literacy.

Key Achievements

Conducted focus groups with 24 middle school students to understand their conceptions of AI. We identified three approaches to interacting with ChatGPT–*AI Tester*, *AI Socializer*, and *Content Explorer*–each revealing unique opportunities to design learning experiences.

Organized the first AI Literacy workshop at the ACM CHI conference, bringing together 43 researchers from varying disciplines.

Designed lo-fidelity prototypes for three museum exhibits

Audience & Settings

Audience: Middle-school students (age 10-14)

Disciplinary area: AI/Computer Science
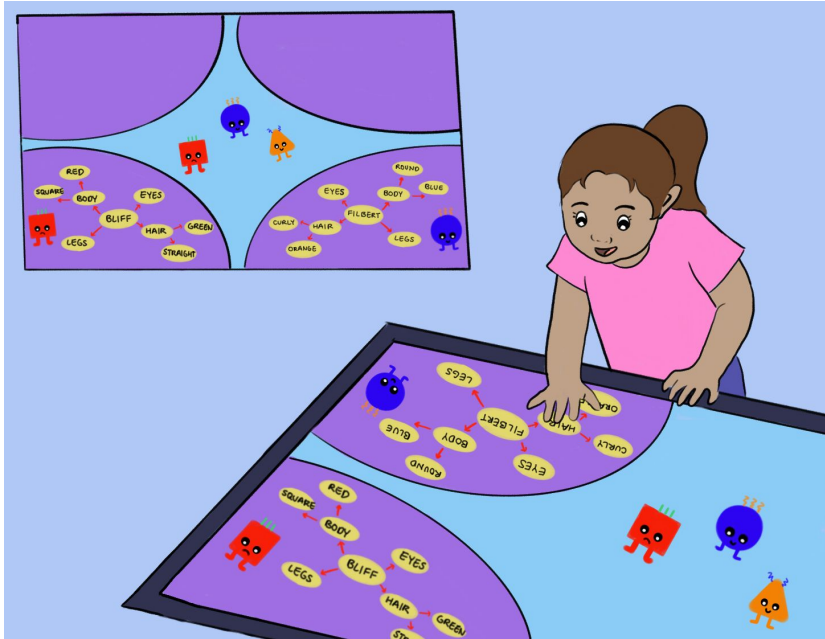
Learning environment: Museum

Access and Inclusion

We are centering underserved groups throughout our design-based research process, including students at Title 1 schools, girls and students who have not previously taken CS courses.

RE VISE

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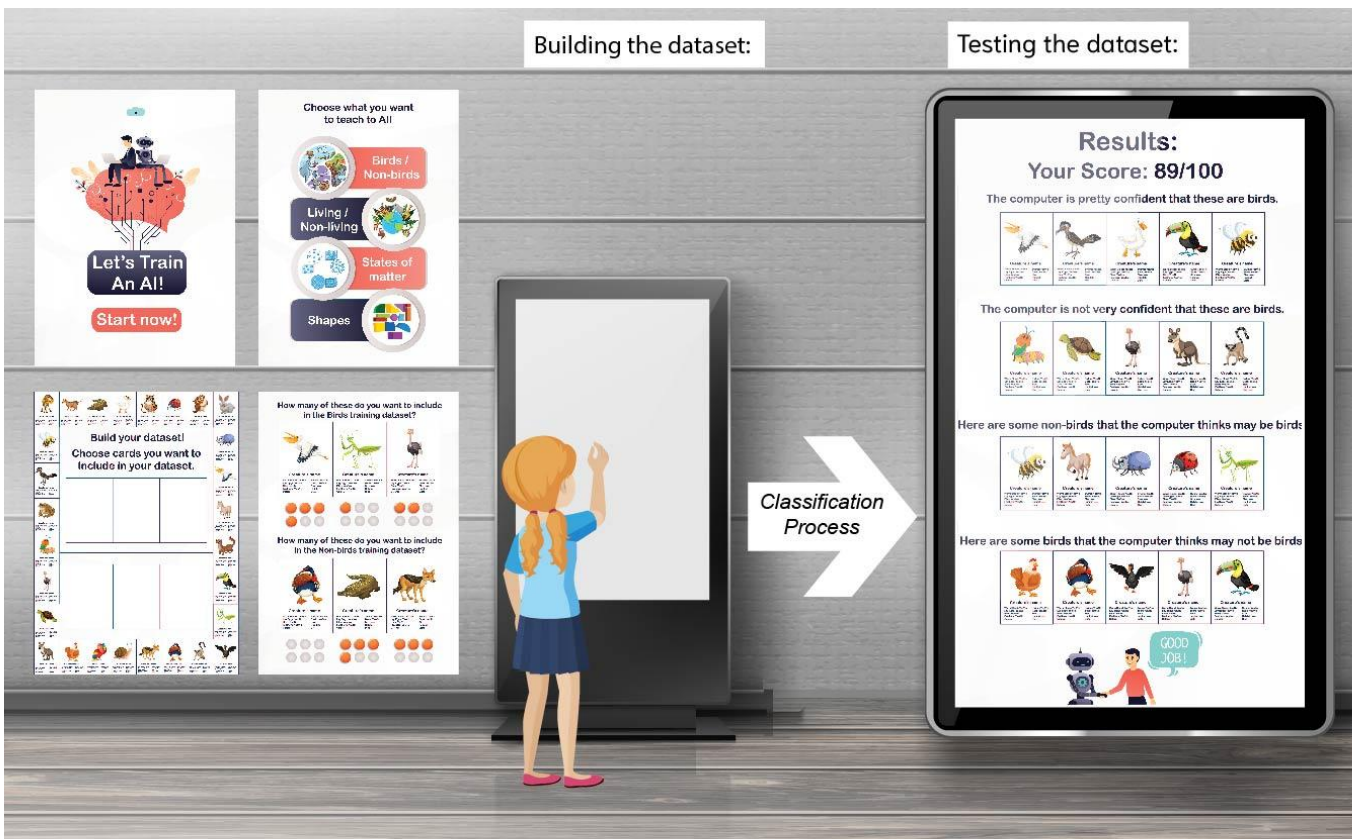
REVISE

Knowledge Net

In the *Knowledge Net* exhibit, learners will be able to create interactive imaginary characters by building semantic networks on a tangible tabletop. In the process, they will learn about knowledge representations and strengths and weaknesses of AI.

LuminAI

LuminAI will engage visitors in creatively learning about how AI learns and represents information. Learners will be able to improvise with an AI dance partner and engage with embodied explainable interfaces to learn more about the AI.

Creature Features

In *Creature Features*, visitors will interactively explore machine learning by training an AI to distinguish between different categories (e.g., bird/non-bird, states of matter, shapes).