Cartoonimator: A Low-cost, Paper-based Animation Toolkit for Computational Thinking

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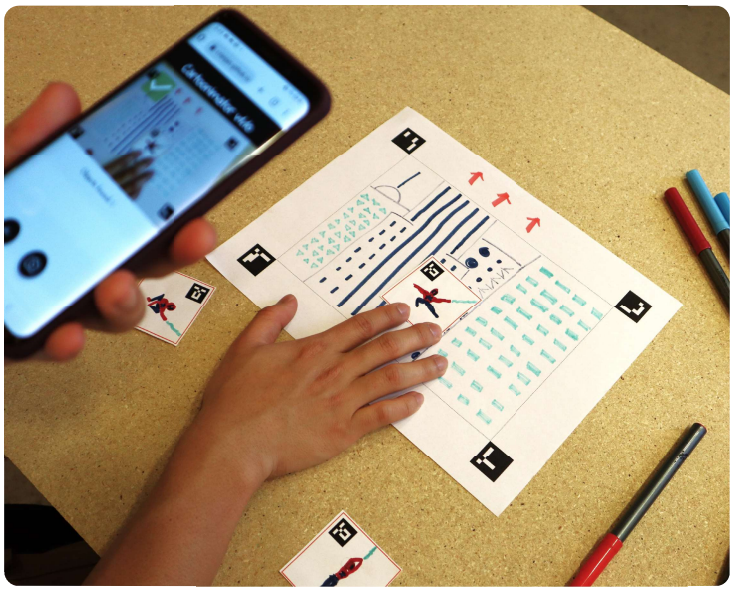
Enabling children to create animations from their drawings, while learning about computer animations concepts and engaging with computational thinking.

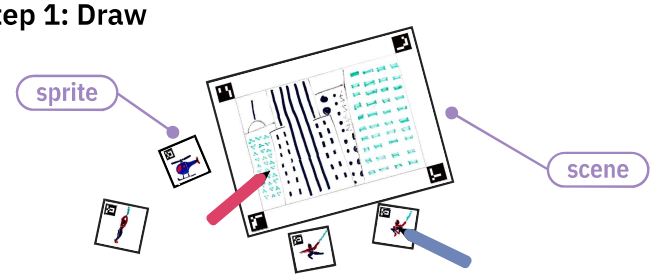
Keywords:

computational thinking | animation | k-12 education

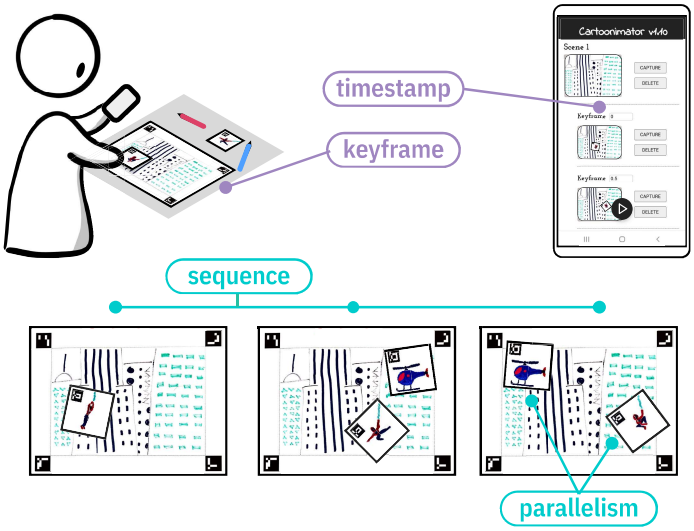
tangible programming | paper computing | aruco | keyframing



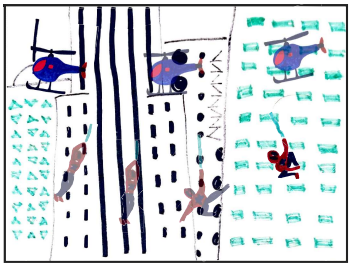
Step 1: Draw



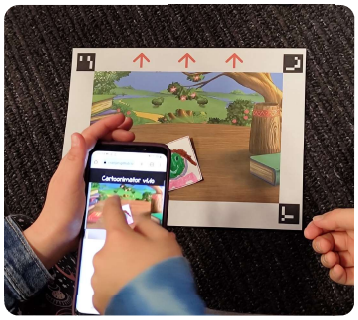
Step 2: Capture scene and keyframe



Step 2: Play your animation



Learnings from Deployment at STEAM Fest

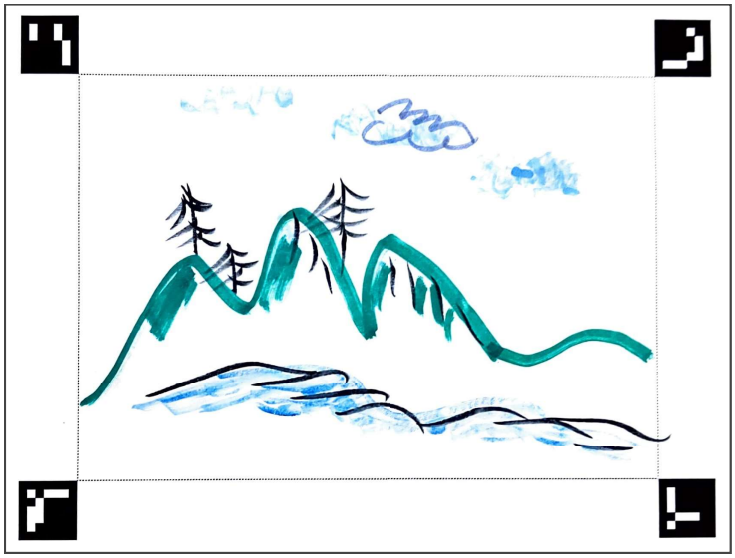


20+ children | ages 4-13

Cartoonimator is **easy-to-learn**, **engaging**, and **collaborative**.

Children were incremental and iterative as they tested and debugged their animation.

Timestamps in the app are not intuitive.



Create your own animation with Cartoonimator! ⟶

Krithik Ranjan is a 1st year PhD student advised by Ellen Yi-Luen Do and Michael L Rivera. His research focuses on enabling students from any economic background to tinker with technology and engage with computational thinking through low-cost technological solutions. Find Krithik at:
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TLAS

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