



Cömmünitü Fütürës & AI

Youth Critical AI Literacy and Their Futures

FUTURE FEELINGS LAB



Team



Noura Howell

Assistant Professor,
Digital Media, Georgia Tech
PI



Michael Nitsche

Professor,
Digital Media, Georgia Tech
Co-PI



Kalia Morrison

Executive Director,
Decatur Makers



Supratim Pait

PhD Student,
Digital Media, Georgia Tech
Researcher

Collaborators



Sylvia Janicki

PhD Student,
Digital Media, Georgia Tech



Yuhan Hou

MS Student,
Digital Media, Georgia Tech



Lorraine Kowalski

Manager,
Decatur Makers



Crystal Farmer

Youth Programs,
Decatur Makers



Xingyu Li

PhD Student,
Digital Media, Georgia Tech

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Problem

- Much of Gen AI education is techno-centric and heavy on digital/virtual tools [1]

[1] Kaiyue Jia and Junnan Yu. 2025. Technologies for Children's AI Learning: Design Features and Future Opportunities (*In CHI 25*)

Problem

- Much of Gen AI education is techno-centric and heavy on digital/virtual tools [1]
- Calls for interdisciplinary approaches and Critical AI Literacy [2]

[1] Kaiyue Jia and Junnan Yu. 2025. Technologies for Children's AI Learning: Design Features and Future Opportunities (*In CHI 25'*)

[2] Duri Long, View Profile, Brian Magerko, and View Profile. 2020. What is AI Literacy? Competencies and Design Considerations (in CHI 20)

Goals

- Develop educational approaches using generative AI.

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- Educational workshops for children aged 8-12 to learn AI fundamentals and ethics.

Goals

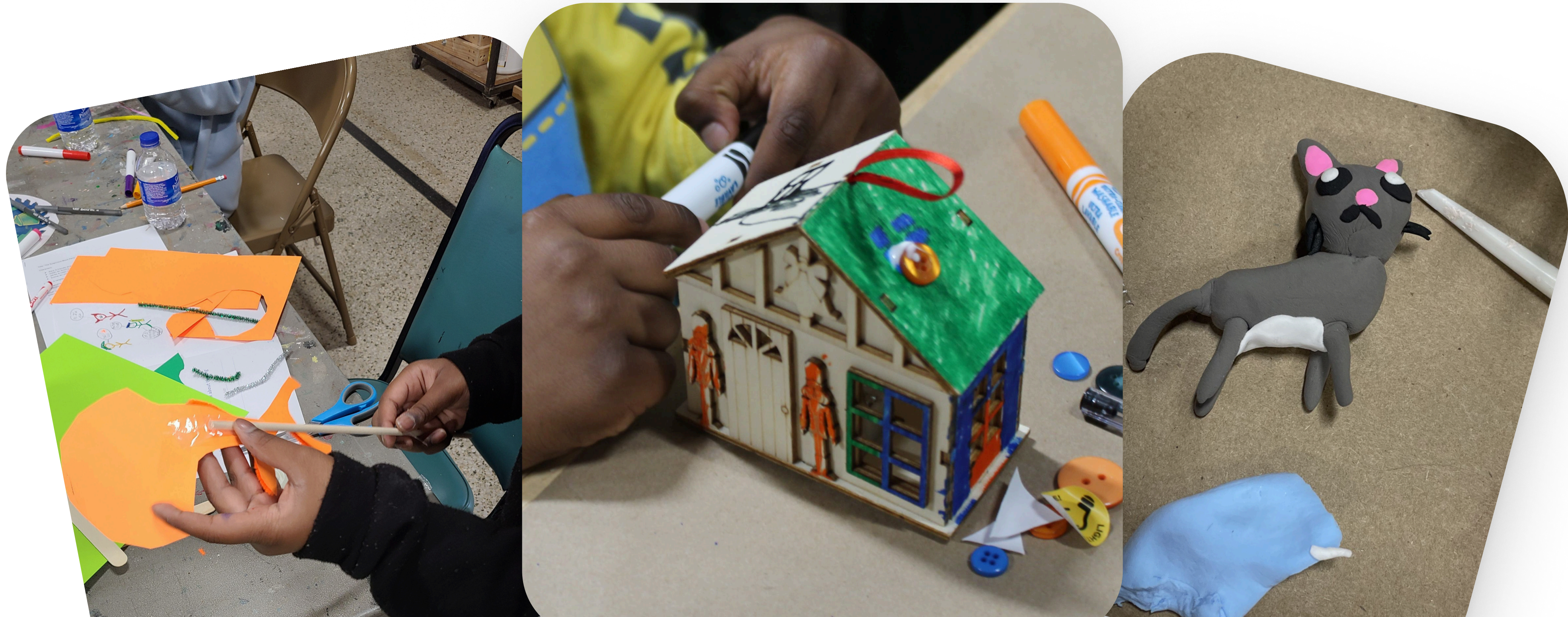
- Develop educational approaches using generative AI.
- Educational workshops for children aged 8-12 to learn AI fundamentals and ethics.
- Encourage children to imagine and create future technologies that benefit their communities.

Approach

Community Futures is a workshop design that utilizes *culturally focused approaches* to empower youth.

Tangible Making

Inquiry through hands on making puppets, models, figures, etc.



Performance

Engaging with the embodied, experiential, and relational aspects of future scenarios.



Design Futuring

Design futuring approaches, such as speculative design, design fiction and others, seek to (re)envision futures and explore alternatives.

1. **Imagine**

Future Scenarios

2. **Reflect**

Collectively

Community Futures

- Combines generative AI with **tangible making/expression, performance** and **futuring**
- Allowing youth to envision and build equitable futures within their local communities.

Workshops

Timeline

Progression of Workshops on critical AI Literacy

Play
futures



Workshop Planning



The AI Educators Workshop

Oct 2024



Jan 2025



Workshop Plan

- 8 Educators
- Exploring **STEAM** methods used in classrooms and their integration with AI



Workshop Plan



- 16 Educators from formal and informal learning settings
- Exploring use of AI methods Image Generation, Text Generation, and Classification in classrooms



Takeaway

- A** *Use of Roleplay*
- B** *Emphasis of hands on activities*
- C** *Concerns about teaching AI ethics in classroom*



Into TO the Mākervērsē

March 2025



Partners



DECATUR

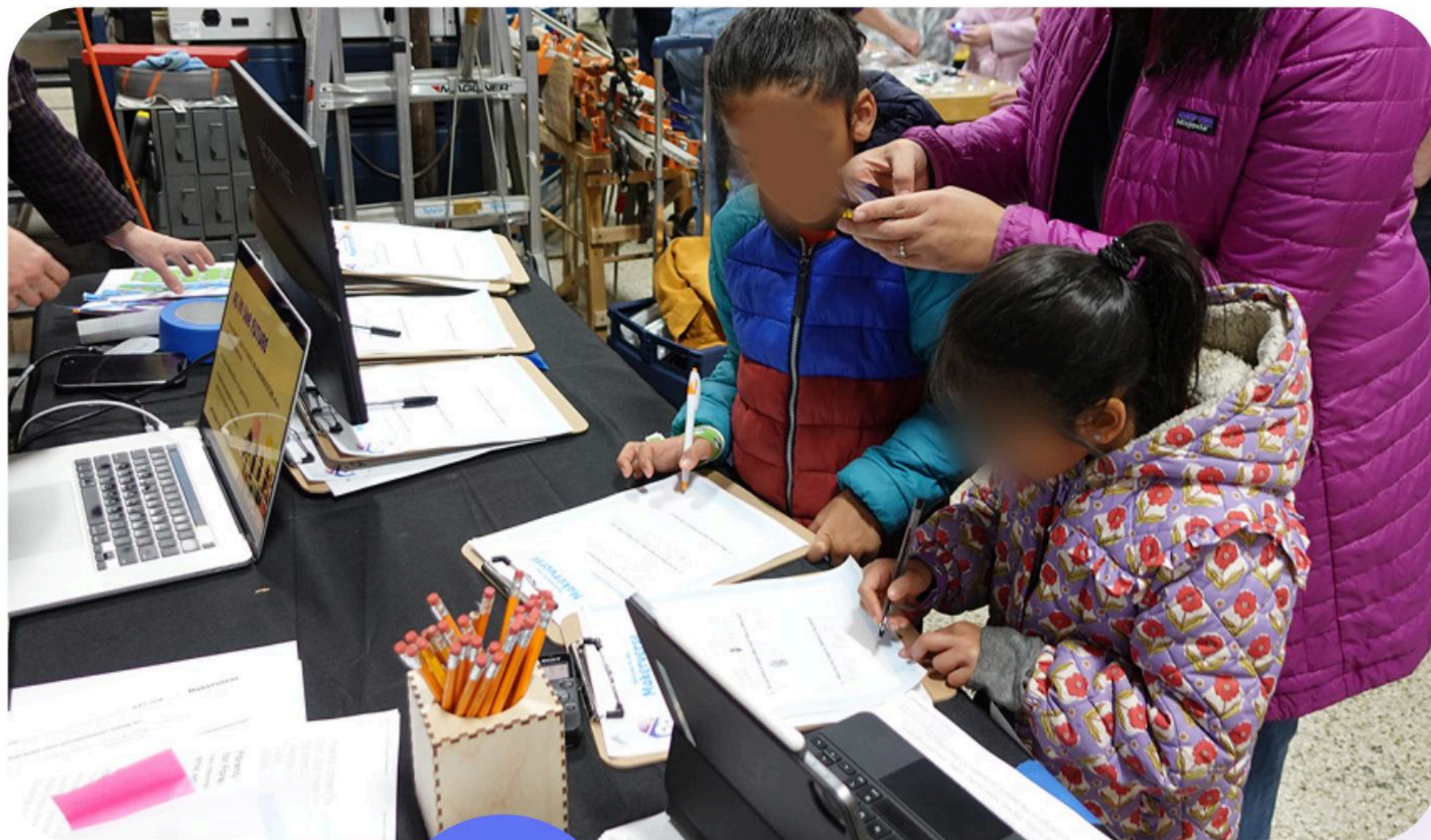


MAKERS

Event Plan

- 250 children and parents
- Exploring communal tangible making, AI augmented animations for a collective futuring of Atlanta





1. Intro Booth

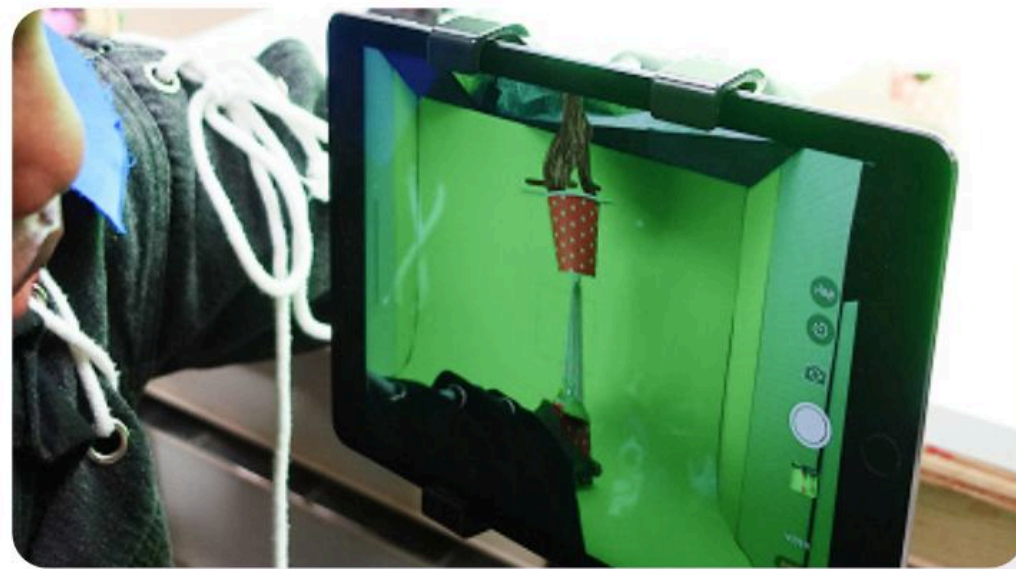
Researchers gave a brief introduction to AI to groups of participants entering the venue.



2. Making Booth

Participants were asked to make physical models representing their visions of their future Atlanta.





3. AI Station

Participants used Runway, an AI tool that generates animations from keyframes, to animate their physical models.

4. Red Carpet Interviews

Children were invited to participate in a brief, semi-structured interview describing their model and design choices, inspirations, and experiences with AI animation.



5. Diorama

The assembly into the physical diorama emphasized community, shared imagination, and the integration of individual contributions.



“[I want to see]
more peace and
harmony including
more nature and
animals.” - EQ7

“I want [our city] to be safe and greener for the health of everyone here.” - EQ23

“I want to see more taking care of the world.” - P39

“I hope for a safer future.” - IQ57

Takeaway

A *Craft as Meaning Making*

“...I made the flower, because flowers are beautiful, and so I want the city to be more green, to have more flowers and more parks.” - P16



“...it's in the forest, there's a bunch of animals, and this person represents, like a queen of the forest...in the background, I just put stuff that kind of represents me.” - P34

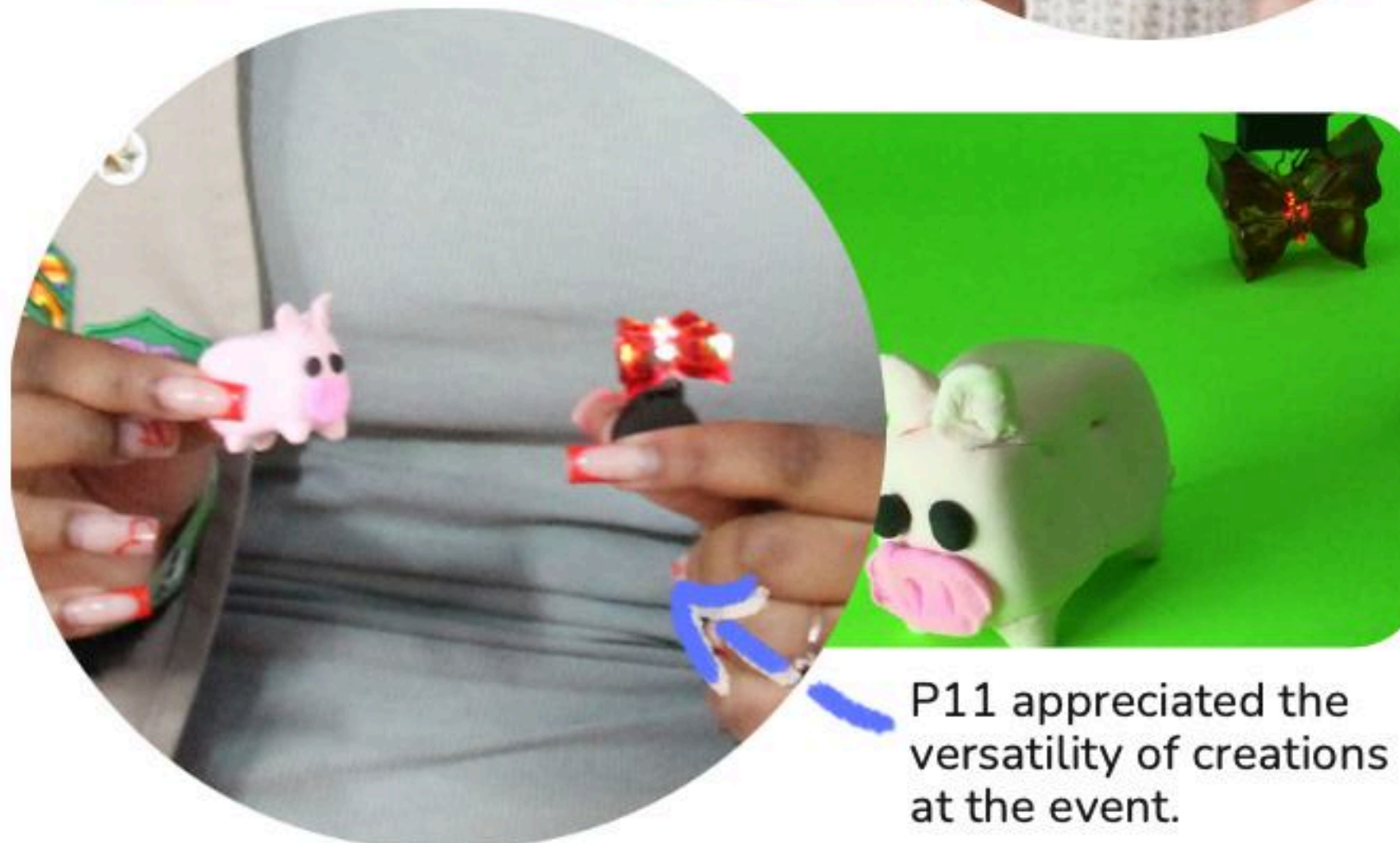


“I really like this creation because it means a lot to me. And I feel like if my dog was here, it would mean a lot to her.” - P39



B *Craft Over AI*

“...there are, a bunch of materials that you can use to build different things, and there’s no limit to what you can build or what you can use to build the creation.”- P5



P11 appreciated the versatility of creations at the event.

Thanks for joining us at
Makerverse

We would love to know again:

1. What was your favorite part of the makerverse?

The AI interpretation of fire when making the film

2. What are your hopes for the future of ^[Anonymized City]? Does your idea of the future remain the same?

All children can have access to AI tech for learning purposes in school. Esp film making.

3. Did you learn anything? Were there any challenges?

AI changes the plan slightly but it's good.

"AI changes the plan slightly, but it's good." - EQ38

Thanks for joining us at
Makerverse

We would love to know again:

1. What was your favorite part of the makerverse?

Making the pig out of clay

2. What are your hopes for the future of ^[Anonymized City]? Does your idea of the future remain the same?

That it develops more and it can cultivate new things

3. Did you learn anything? Were there any challenges?

I learned that AI isn't always going to work on the 1st try.

"I learned that AI isn't always going to work on the first try." - EQ43

Thanks for joining us at
Makerverse

We would love to know again:

1. What was your favorite part of the makerverse?

Everything

2. What are your hopes for the future of ^[Anonymized City]? Does your idea of the future remain the same?

If yes I hope we learn to care or care more about things

3. Did you learn anything? Were there any challenges?

I learned that A.I. sometimes doesn't listen

"I learned that AI sometimes doesn't listen." - EQ23



Imperfect AI



Community Futures & AI

Mary Lin Elementary – March 2025

Partners



Workshop Plan

- 2 Workshops held in classroom: Day 1 (n = 28) & Day 2 (n =30)
- Exploring future scenarios for the **local environment** with AI integrated activities



Workshop Flow

1

Introductory session to AI:
Kids imagine future scenarios for
the creek at Candler Park behind their
school



2

Kids use LLMs for activities like news headline generation
and script generation for future scenarios

3

Use image generation for reimagine a local creek futures



4

Build and act as characters for discussions on the future of creek after improvisations of the AI outputs



Takeaway

Work in Progress

1 *Highlighting their shared concerns*

“Our community imagines creek might become a swamp like area that will be polluted and unhealthy in the future due to climate change, pollution and other bad chemicals”



Lets Look Back

“I felt like the AI made it cheesy”

Q1. How did you feel about the story the AI generated?
I felt like the AI made it cheesy

Q2. What did you change about story generated by AI and why?
the end was cheesy so we took it out

Q3. How do you feel about the future generated by the AI in the end of the discussion?
It was pretty

Q4. How was the workshop?

the workshop was fun

“the end was cheesy so we took it out”

Lets Look Back

Q1. How did you feel about the story the AI generated?
I like the story, but some parts weren't really our style.

Q2. What did you change and why?
we changed the hug, because I can't hug.

Q3. How do you feel about the future generated by the AI in the end of the discussion?
I feel like AI made life seem really go-with-the flow when it's not

Q4. How was the workshop?

It was pretty fun.

“Some parts weren't really our style”

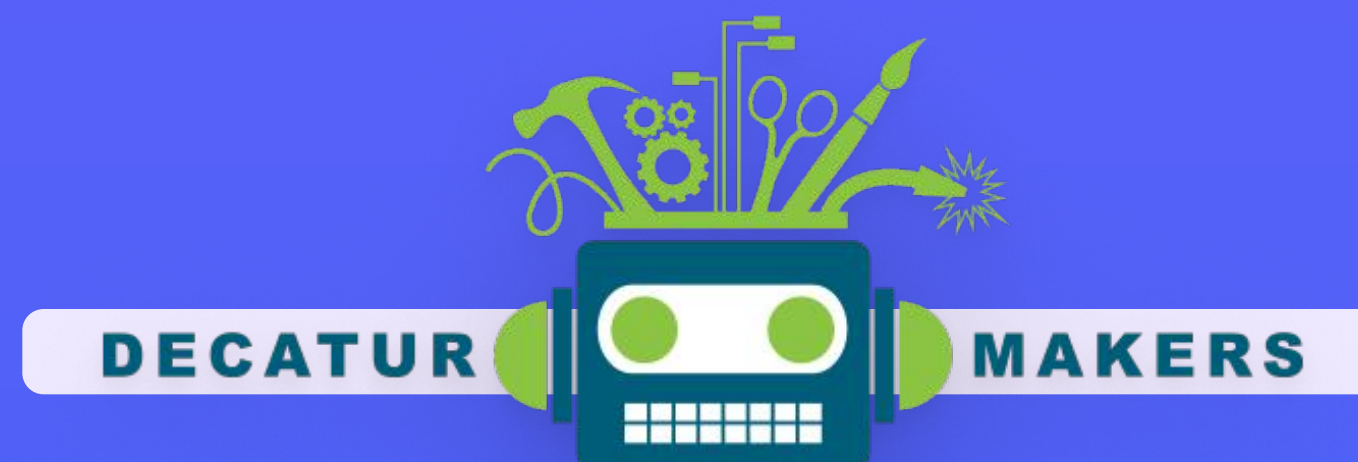
“I feel like AI made life seem really go with the flow when it's not”

2 Recognising AI as an imperfect tool



Spring Break Workshops – April 2025

Partners



Workshop Plan

- 4 Day Workshop
- Exploring **local and personal community aspects.**
- 13 Kids from both traditional and home school settings



Workshop Flow

Day 1



Introduction to AI and image generation with objects from the makerspace

I think AI is

“cool and interesting and neat and might take over the world someday but probably not”



Day 2

Reimagine objects as futuristic objects using image generation and imagining spaces for them.



Day 3



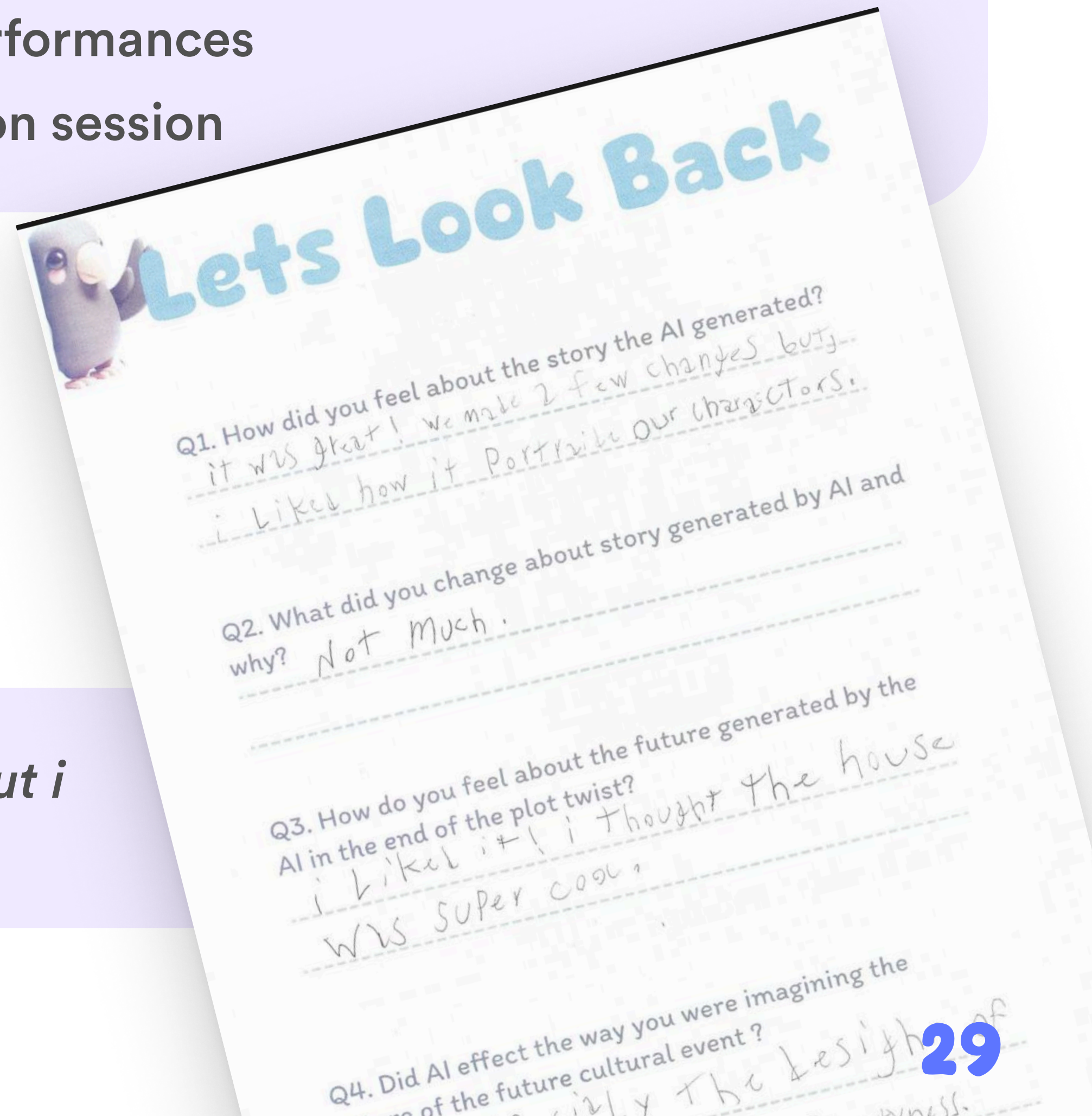
- Imagine characters towards a big idea together for the space
- Generate scripts discussing changes about the big idea
- Make characters



Day 4

- Make changes to scripts
- Final performances
- Reflection session

“it was great, we made a few changes but i liked how it portrayed our characters.”



Takeaway

Work in Progress

1 Community remains central to futures



2 Unalignment Perspectives to AI

“The future the AI imagined wasn’t what I imagined it to be

Q1. What did you like (most) and dislike (least) about how the AI imagined the future object?

The future the AI imagined wasn't what I imagined it to be

Q2. Imagine that your family has this object in the future, What do you think your family would think of the future object?

They would like it

Custom Wrapper

Admin Side

CommunityFutures

Dashboard

Admin

Hi, Admin User! 🙌

What would you like to create today?

Chat with AI

Have a conversation with an AI that can answer questions and help you learn

"Hi there! What would you like to learn about today?"

"Can you tell me about space and the planets?"

Start Chatting

Create Images

Turn your imagination into pictures with the power of AI

Space rocket

Underwater castle

Create Images

Quick Access

Chat

Create Images

Image Refiner

Community Futures

Dashboard

AI Image Creator

Create amazing images with your imagination!

Create Your Image

Describe the image you want to create

Describe the image you want to create...

Try to be specific about what you want to see in the image.

Examples:

A friendly dinosaur having a tea party

A magical treehouse in a giant oak tree

A robot playing with a puppy in a park

A spaceship landing on a purple planet

A penguin wearing a party hat and eating cake

A dragon learning to ride a bicycle

Your Created Image

Your image will appear here

Conclusion

Return to Problem

Much of Gen AI education is techno-centric and heavy on digital/virtual tools.
Addressing calls for interdisciplinary approaches to critical AI Literacy

Goals

Develop educational approaches using generative AI

Contribution


- Total of **5 Workshops**
- Engaged with **24 Educators**
- Engaged with around **150 children**, and **large number of parents**
- Held workshops at both **schools** and **informal learning** settings
- Generative AI activities centred around various modalities - **image, video** and **text** generation
- **Publication** - *“Into the Makerverse: Communal Tangible Making and Place-Based Futuring with AI”* accepted to *ACM Tangible and Embodied Interaction 2026*

What we learned.. so far

Work in Progress

- 1 *A hybrid approach to critical AI literacy: tangible making, performance, design futuring*
- 2 *Community focus scaffolds this hybrid approach*
- 3 *Highlights the situated nature of critical AI learning*

Future Work

- 1 Develop tangible and performative engagements for critical AI literacy
 - 2 Work with culturally situated populations and futuring methods
 - 3 focus of my PhD work
- 

Acknowledgements



- Teachers - Ms. Carter from Mary Lin Elementary and staff
- Volunteers for our workshops from Georgia Tech and Decatur Makers

“Community Futures”
highlights **hands-on, local, and collaborative**
approaches to AI literacy.



Thank you

contact:

Supratim Pait

PhD Student, Digital Media

spait3@gatech.edu