Glitzy here back with some important tips! Remember...

AI can be helpful, but it's just a tool - like a calculator or computer. When you need real advice, ask a trusted grown-up.

AI can make mistakes, so always double-check its answers!

girls who code

Emerging Tech Zine Vol 1

AI | What is it?

Learn more about GWC Clubs!

girls who code

girlswhocode.com

Girls Who Code is an international nonprofit working to close the gender gap in technology and leading the movement to inspire, educate, and equip students who identify as girls or non-binary with the computing skills needed to pursue 21st-century opportunities. Over the next five years, Girls Who Code will reach 5 million girls, women, and non-binary individuals to close the gender gap in tech jobs.

HAVE QUESTIONS ABOUT THE ZINE?
Email us at curriculum@girlswhocode.com

@girlswhocode

Words and illustrations by Chloe Varelidi
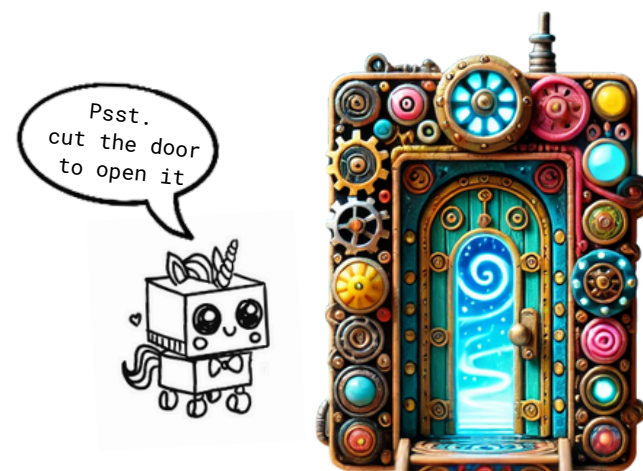
Psst. cut the door to open it

What is AI ?????

Good day! I am Unit-88 Glitterbook, though friends simply call me Glitzy—or, on occasion, "you marvelous chrome beast of wisdom." Think of me as a librarian who's read every book on every shelf in every library worldwide. I remember it all with the precision of an infuriatingly well-organized elephant. I'm here, ready to answer any and all your questions.

Have I mentioned my pet robot unicorns?
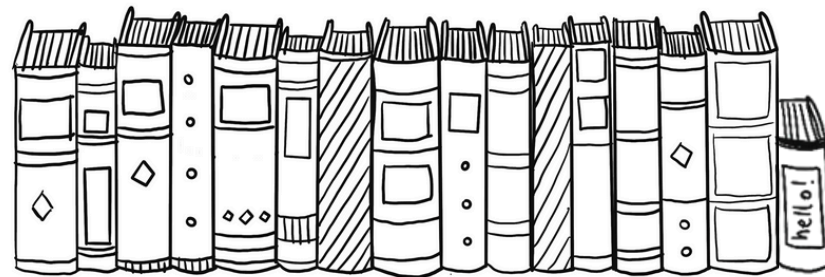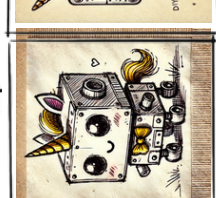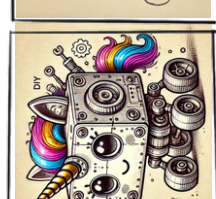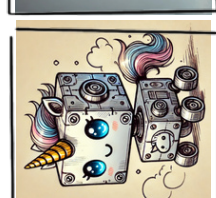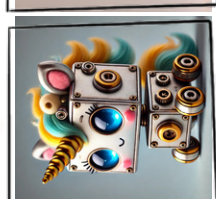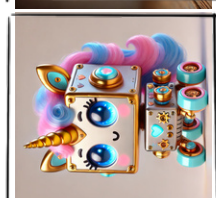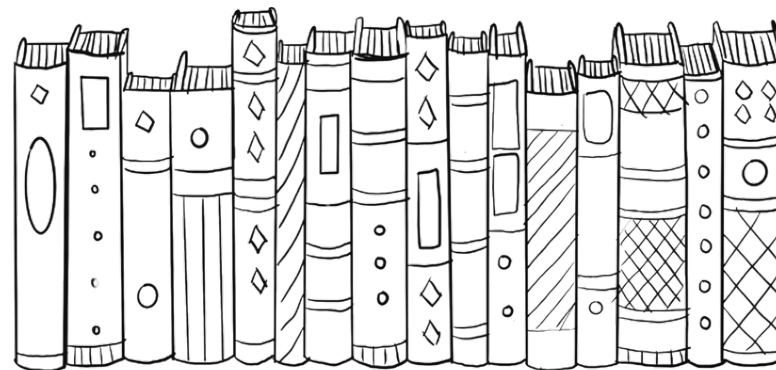
Let's have some fun! Cut out this rectangle, then slide the paper with the row of books from above into the slit so it fits snugly between the two slits. Voila—you have your own AI library!
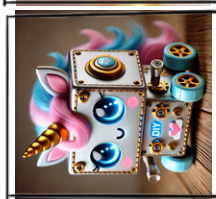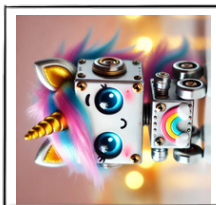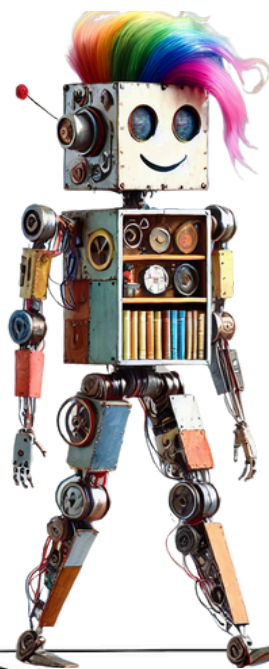
cut these slits

AI is a special computer program made by people that does things humans would usually do.

One way to think of AI is like a robot librarian who has read bajillions of books, and who can help you answer questions from a giant "library" of information.
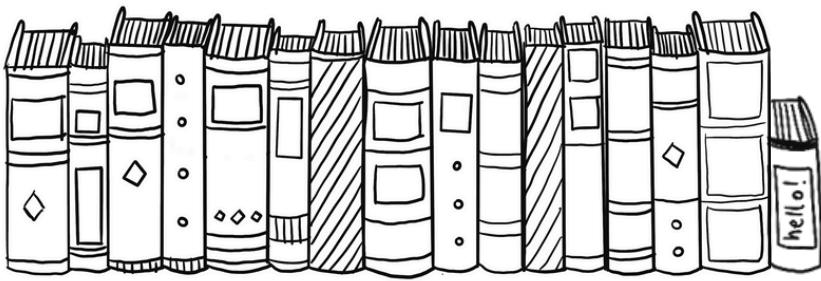
What do you want to ask about AI?

How does AI work?

AI learns by finding patterns! Imagine it's reading books about unicorns and robots, spotting details like shapes and features.

Then, it combines those patterns to answer questions about unicorns, robots or even something new like a unicorn robot!

horn
robot face
pink hair
wheels

hi let's play a game

1. Set Up: Cut out the cards on the next page. Mix the word cards together and give each player 3 cards.
2. Pick a Category: Draw a category card, like "Things you don't want to find in your backpack."
3. Match a Card: Each player picks a word card from their hand that best matches the category.
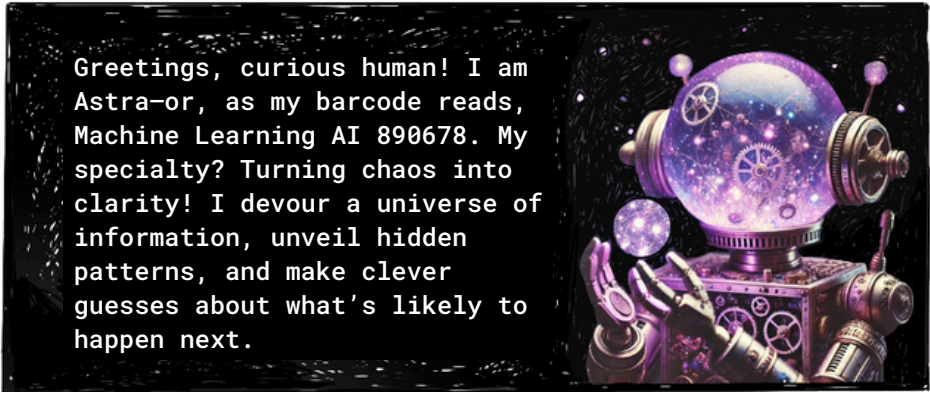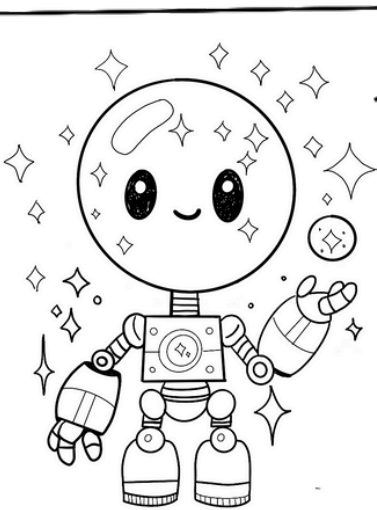4. Play Rounds: Draw new category cards and keep matching until all cards are used

In this game, you have to match a word card to a category. When you match a word card to a category, you're recognizing patterns between the words you have (data) and the category (pattern). AI systems find patterns in data and use those to make decisions.

Worms	Goldfish	Skunk
Sweaty Sock	Cereal	Porcupine
Chewed Gum	French Fries	Honey Badger
A Spider	Sardines	Vulture
Ants	Broccoli	Sand
Old Banana	Pineapple	Monkey
Glitter	Jalapeños	Piranha
Toothbrush	Marshmallows	Scorpion
Things you don't want to find in your backpack	Weirdest pizza toppings	Animals you definitely don't want as a pet

Oh hi!
Want a toy? I just made a thousand, like, five seconds ago. I'm Stella! Generative AI, technically, but that name's <u>so</u> boring. Have you met my sister, Astra? She's obsessed with games—total pattern nerd!

Let's create!

Meowdy! Welcome to the sisters' room. Can you guess who's the creative one?

Generative AI is a type of computer program that can create pictures, stories, music, or even toys, by learning from lots of examples.

Want to try it out? Let's make a new toy like Generative AI

1 Let's study the "data set": Look at the three toys. Notice their shapes, colors, and details.

2 Time to mix parts of each toy—maybe bunny ears on a robot or a bottle body with buttons! Cut, collage, or draw your own unique toy!

give your
toy a name

Train your own AI

You can train me to be...

a baby dinosaur

a curious astronaut
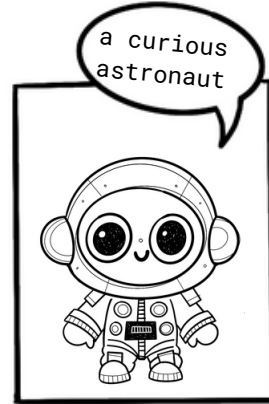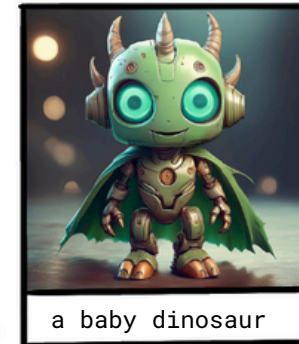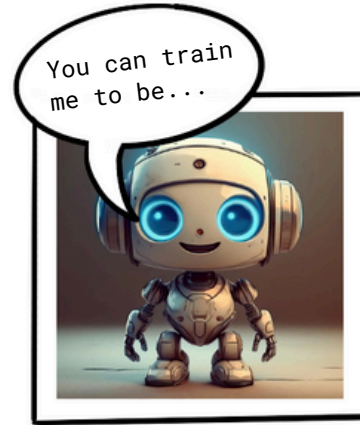
You can train AI to do lots of things by teaching it, almost like training a pet! AI looks at examples—like pictures of astronauts—then finds patterns and uses what it learned to answer questions.

Now it's your turn to train AI!

Imagine kindergartners are asking lots of questions about astronauts. What information should the AI learn to help answer their questions?

add 3 words to
train me in here

How can we use AI to solve problems?

Researchers at Columbia University's LEAP center are using AI to improve climate predictions, helping communities better plan and adapt to climate impacts.

Researchers from Yamagata University in Japan, in collaboration with IBM Research, used AI to discover three hundred new geoglyphs in Peru's Nazca Desert, doubling the known ancient line drawings by analyzing aerial photos.

Meet Kynnedy

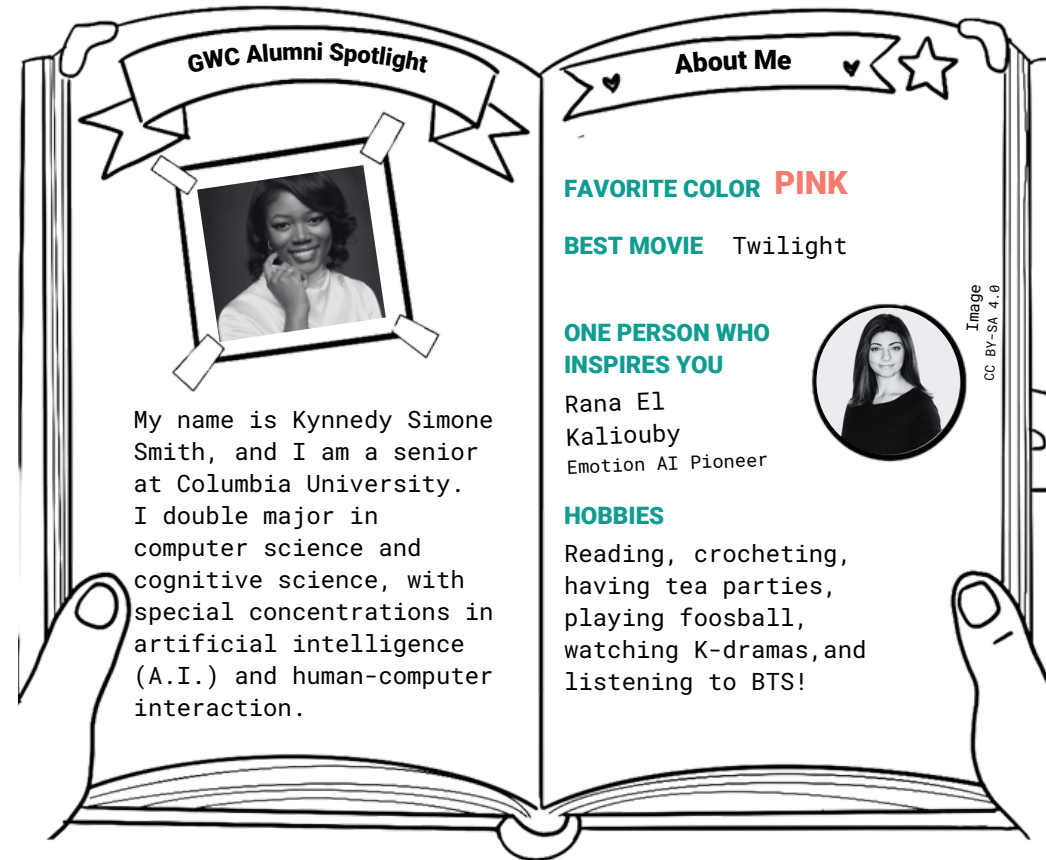### GWC Alumni Spotlight

My name is Kynnedy Simone Smith, and I am a senior at Columbia University. I double major in computer science and cognitive science, with special concentrations in artificial intelligence (A.I.) and human-computer interaction.

About Me

FAVORITE COLOR PINK

BEST MOVIE Twilight

ONE PERSON WHO INSPIRES YOU
Rana El Kaliouby
Emotion AI Pioneer

Image CC BY-SA 4.0

HOBBIES
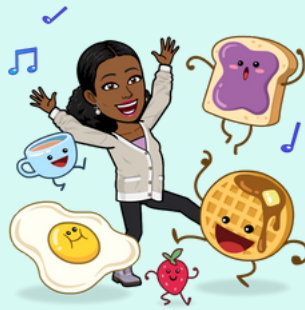Reading, crocheting, having tea parties, playing foosball, watching K-dramas, and listening to BTS!

ONE PIECE OF ADVICE I WOULD GIVE MY YOUNGER SELF
You don't have to wait until you're an "adult" or have all the skills to start chasing your dreams. You have the power to create positive change right now!

Turn the page to see what problem Kynnedy solved with AI

Eating HEALTHY w/ AI

Presented by: Kynnedy Smith (GWC AAC Member)

- A bitmoji story -

What if AI helped us pick healthier food at lunch? Let's see what happens with and without the NutritionAI app!

Eating lunch without NutritionAI

It's Taco Tuesday!! Kynnedy fills her plate - it's a special day!

For dessert, she picks a big slice of pie! Its yummy, but might not be the best choice.

Her tummy hurts after lunch. Kynnedy wishes she made healthier choices :(

Eating lunch WITH NutritionAI

Kynnedy scans her lunch with NutritionAI. It warns her that some foods aren't healhy

The AI suggests better alternatives based on her dining hall and preferences.

Thanks to the AI's advice, she picks a nutritious meal and feels energized!
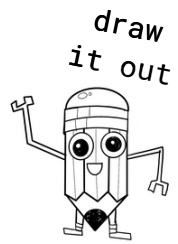
What problem would *You* solve with AI?

Think about a challenge you or your friends have. Write down or draw one way AI could help you with that problem, just like Kynnedy did.

1

2

✂

3

6

4

5

Make your own mini zine to share your AI idea!

1. Cut out this half page from the zine.
2. Fold the half-letter page in half lengthwise,
   then widthwise, and again into quarters.
3. Cut a slit along the center fold (where the
   scissors are).
4. Push edges together to form a booklet.
5. Fold into a zine and illustrate your idea.

Meet the robots

Unit-88 Glitterbook

Nickname:
Glitzy

Strengths
Has read every fact, figure, and detail from a vast library of data.

Weaknesses:
Sometimes she answers your questions so fast she makes mistakes. Always ask her " How do you know that?"

Glitzy

Machine Learning

Nickname:
Astra

Strengths
Excels at recognizing even the tiniest patterns hidden in massive amounts of data to make predictions

Weaknesses:
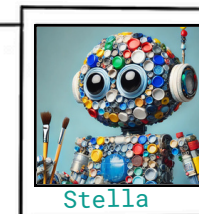Her confidence decreases if she doesn't have enough data.

Astra

Generative AI

Nickname: Stella

Strengths
Can generate endless ideas, from pictures to music to stories.

Weaknesses:
Some of her ideas turn out amazing, but others... let's just say they're "unique."

Stella

Training Bot

Nickname:
Coach T.

Strengths
Can learn to do almost anything from solving math problems to baking a cake.

Weaknesses:
Won't know what to do without clear examples to learn from.

Coach T