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#CSPDWeek2026

#CompSciNJ

@csteachersorg



New Jersey CSPDWeek

This material is based upon work supported by the National Science Foundation under Award No. 2607763.



Beyond the worksheet: Using AI to create engaging learning experiences (9-12)

Meet the team!



Adhwita Gopi Selvan
Founder & Co-President

Adhwita is a recent graduate of the University of Illinois Urbana-Champaign with a B.S. in Computer Science + Education: Learning Sciences. She is a Cloud Technology Consulting Associate in New York City, where she helps clients drive digital transformation and solve complex business challenges. Her interests include cloud technology, strategy, educational technology, and innovation.

Meet the team!



Grishmaa Chaudhary
Chief Operating Officer

Grishmaa is a rising freshman at New York University. She intends on pursuing the pre-med track.

Meet the team!



Nancy Wang
Administrative Officer

Nancy is a rising freshman at Cornell University who plans to study math. Outside of Inspire Curiosity, she works at Kumon and as a private tutor.



What do we do?

OUR MISSION AND GOALS

Our mission:

Serve as a ***stepping stool*** for students into the world of STEM: encourage curiosity, strengthen inquisitive minds, and encourage students to ask questions about the world around them.

Offer an innovative approach to STEM education through a ***hands-on*** and ***immersive*** curriculum. Building next generation of critical thinkers and problem solvers.

**Free, virtual
classes**

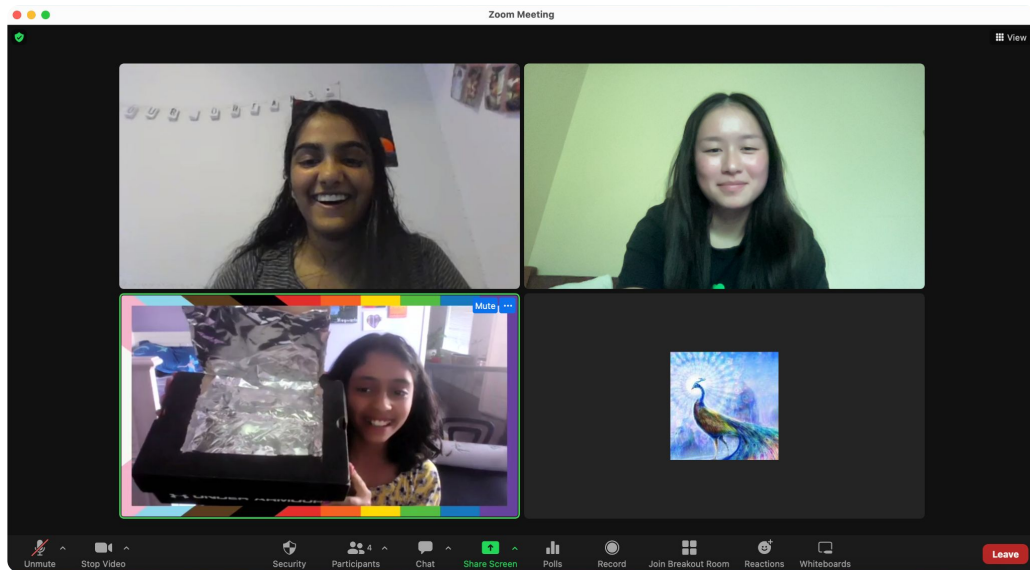
**In-person
outreaches**

**Open access to our
educational materials**



How did we get here?

OUR HISTORY FROM 2020 UNTIL NOW



Pennington, NJ 2020



- Founded Inspire Curiosity
- Started with just a few local students in the central NJ area
- Wanted to be in-person, but then the pandemic hit

As students also learning during the pandemic, we realized a need for more immersive and hands-on virtual education.

2020: 1 chapter, 1 country



*2026: 3,000+ students reached
20+ global chapters*



Demo

VIEW SOME OF OUR LESSON PLANS AND STUDENT WORK!

All lessons are inspired by AI!



How to use AI to create engaging
learning experiences?



Making Lesson Plans with AI

A SIMPLE 5-STEP PROCESS



1

Define
Your Goals



What do you want
students to know
and be able to do?

2

Give AI
Clear Input



  
Grade Level Topics Constraints

3

Generate
Your Plan



- ✓ Lessons
- ✓ Activities
- ✓ Assessments

4

Review &
Customize



- ✓ Check accuracy
- ✓ Adjust to your voice
- ✓ Add your touch

5

Teach &
Reflect



- ✓ Use the plan
- ✓ Gather feedback
- ✓ Improve next time

How Teachers Can Use AI to Create Curriculum

Save time. Personalize learning. Inspire students.



Ways Teachers Use AI



Plan & Organize

Lesson plans, units, pacing guides



Differentiate

Adapt for diverse learners and levels



Create Resources

Activities, readings, slides, and more



Assess & Reflect

Quizzes, rubrics, student feedback



Stay Inspired

New ideas, strategies, and real-world connections

Good Prompt Examples



Create a 5-day lesson plan for 10th grade English on persuasive writing. Include activities, resources, and assessments.



Design a project-based learning activity for 11th grade biology about ecosystems. Include the driving question, steps, and rubric.



Provide 3 differentiation strategies for a 12th grade math lesson on quadratic functions for English learners and advanced students.



Benefits of Using AI



Saves valuable time



Personalizes learning



Boosts student engagement



Supports learning goals



Encourages creativity



Reduces teacher workload



AI in Computer Science Education



How AI Helps CS Students



Learn Faster

Instant explanations



Code Smarter

Debug and improve faster



Build Real-World Skills

Work on creative projects



Get Support

Practice anytime



Stay Curious

Explore new tech



Result: More confidence, creativity, and problem-solving.

How Teachers Can Use AI



Create Materials

Lesson ideas, quizzes, examples



Differentiate

Adjust content for all learners



Give Feedback

Quick, helpful student support



Save Time

Automate routine tasks



Goal: More time teaching. Less time planning.

AI Models & Best Uses



ChatGPT

Lesson ideas

Explanation

Brainstorming



Microsoft Copilot

Office integration

Quick resources



Claude

Deep reading

Summaries



Gemini

Research

Multiple perspectives



Takeaway: Try different AI tools — each has a strength.



AI Inspired Challenge: Python Game for Good

Use code to solve real problems and make a difference.



STUDENT CHALLENGE

Create a Python game that helps people make better choices in the real world.

EXAMPLE PROBLEMS TO CHOOSE FROM



Water
Conservation



Reduce
Waste



Mental Health
Awareness



Protect
Our Planet

YOUR GAME MUST INCLUDE:

- ✓ Clear goal and message
- ✓ At least 2 levels or challenges
- ✓ Score or feedback system
- ✓ Engaging visuals or text
- ✓ Explain how your game addresses the problem

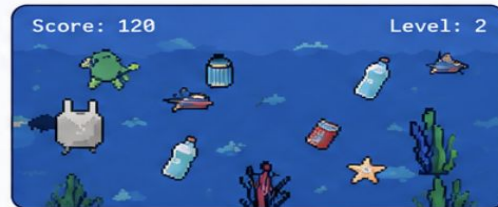
modify accordingly based on skill level*



EXAMPLE GAME IDEA

Save the Ocean!

Avoid trash, collect recyclables, and keep the ocean clean.



HOW IT HELPS:

Teaches players about pollution and encourages sustainable choices.

STARTER CODE (EXAMPLE)

```
import random
score = 0
trash = ["bottle", "bag", "can", "wrapper"]
while True:
    item = random.choice(trash)
    action = input("Trash or Recycle? (t/r): ")
    if item in ["bottle", "can"] and action == "r":
        score += 10
        print("Good choice!")
    else:
        score -= 5
        print("Oops! Try again.")
    print("Score:", score)
```

Random trash appears

Player decides what to do

Earn or lose points

How do we teach students AI?

Artificial Intelligence

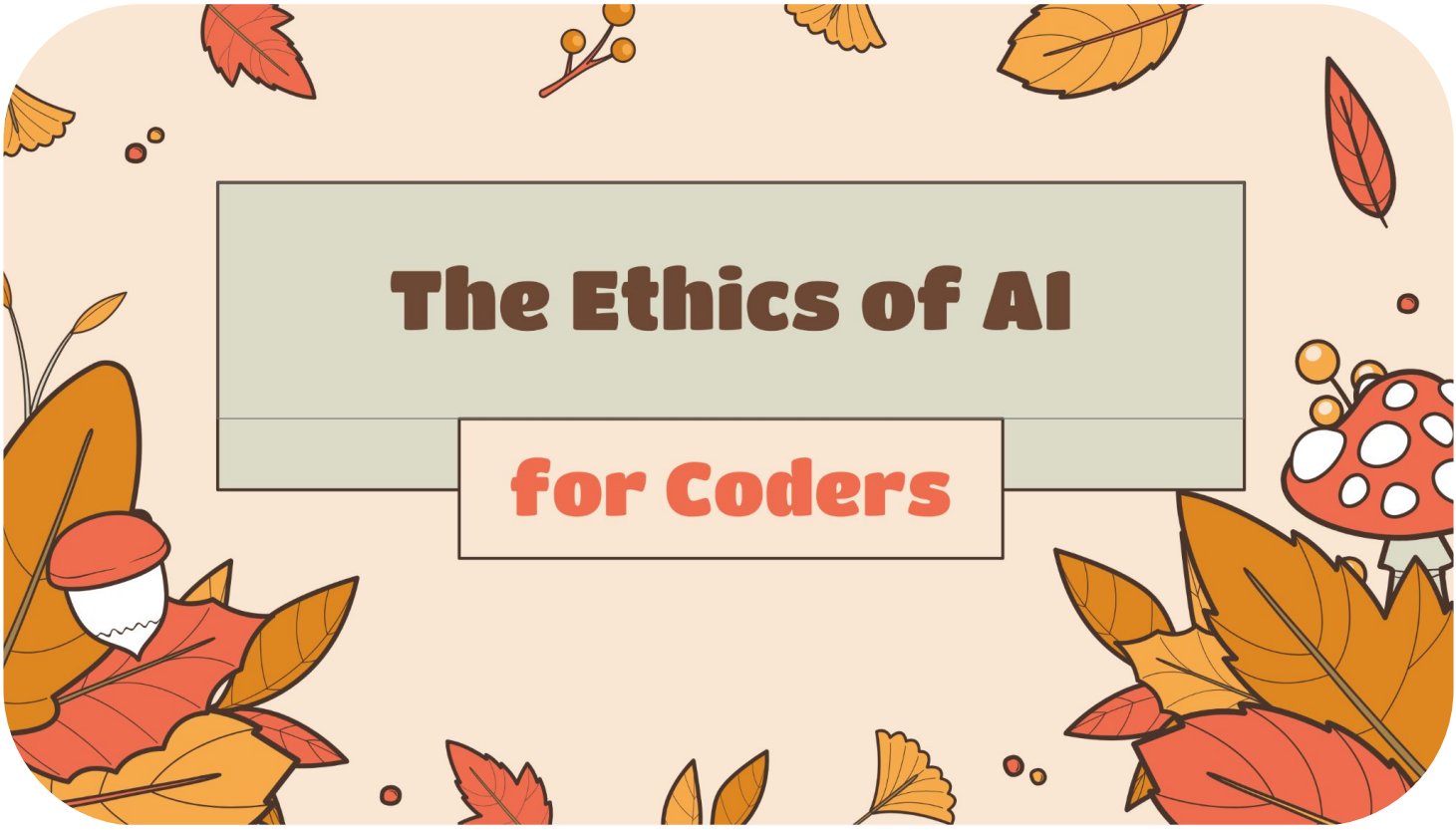


DEEP FAKES





AI & ChatGPT

The background is a light beige color with various autumn-themed illustrations. There are several orange and red leaves scattered around. In the top center, there is a small branch with three yellow berries. In the bottom left, there is a beaver wearing a red cap and a white scarf, partially obscured by large orange and red leaves. In the bottom right, there is a red mushroom with white spots and three yellow berries on top, also surrounded by leaves. The title text is centered in two boxes: a large light green box for the first line and a smaller white box for the second line.

The Ethics of AI

for Coders

Mentorship Program: Expanding Student Access to Technology Professionals

Mentorship Program: Expanding Student Access to AI

Inspire Curiosity × Microsoft Employee Volunteers

Inspire
Curiosity



Reach out if interested in joining the
next cohort!



Building Skills. Creating Opportunities. Inspiring Impact.



Connect



Learn



Apply



Grow



Lead



Questions?



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