

DEVELOPING AI TOOLS FOR K-12



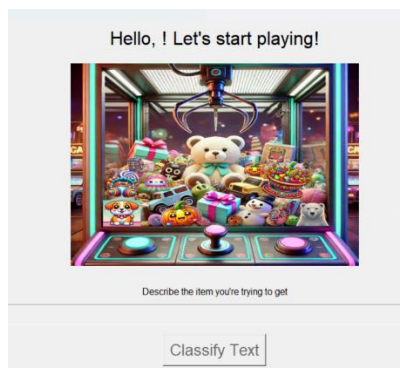
These original software products were developed in Fall 2024 by students at UTSA to teach key ideas in Artificial Intelligence, including machine learning, image reconstruction, text processing, and recommender systems. We hope that you enjoy interacting with them!

Drs. Fred Martin and Ismaila Sanusi,
Computer Science

Dr. Deepti Tagare,
Interdisciplinary Learning & Teaching

ClawAI

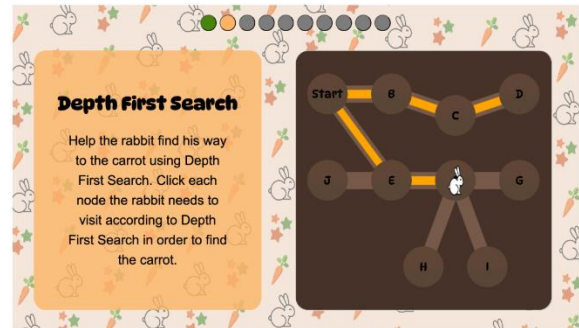
Yeshaswini Parvatham & Aishat Kolawole



“Win” items from a virtual claw machine by describing them to an AI! The tool uses an AI model to classify player descriptions and match to items displayed in the claw machine.

Into the Rabbit Hole

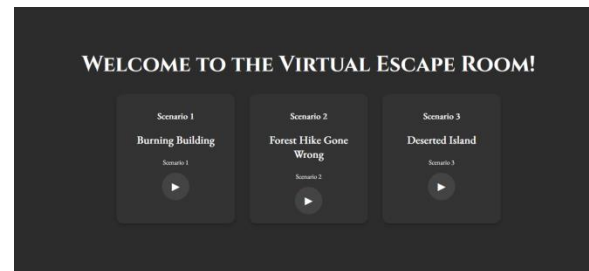
Durga Rajarajan



Help the rabbit find carrots and learn about two key search algorithms: Depth First Search and Breadth First Search.

Virtual Escape Room

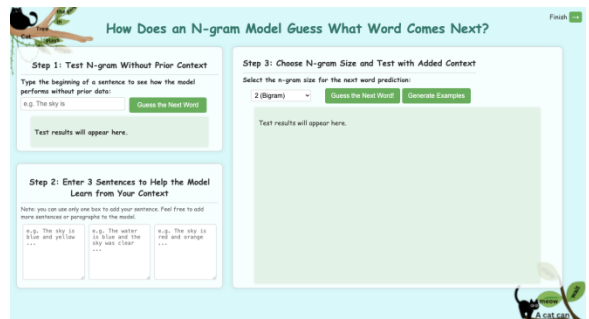
Pilar Mejia and Alex Lemire



Use AI-powered prompt engineering to find your way out of any of three adventure scenarios!

Next Word Adventure

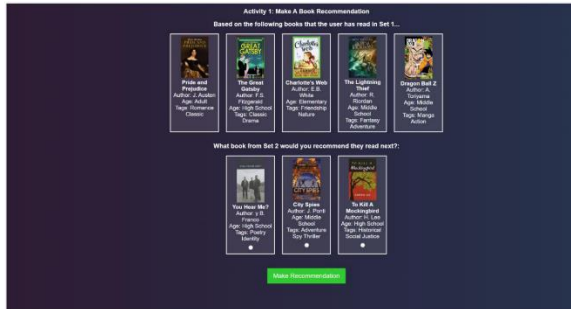
Saniya Vahedian Movahed



Explore how computer programs predict the next word with “n-grams,” sequences of repeated words.

Pick-A-Book

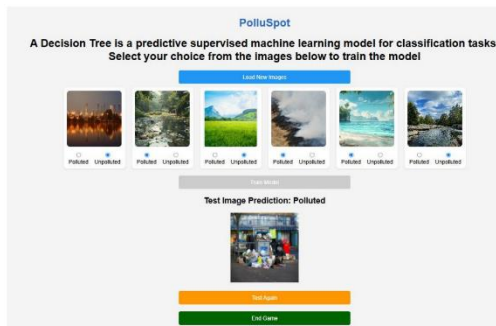
Lawrence Holland, Jules Valle, and Desiree Salazar



Learn how recommender systems work by modifying meta-data in a virtual library.

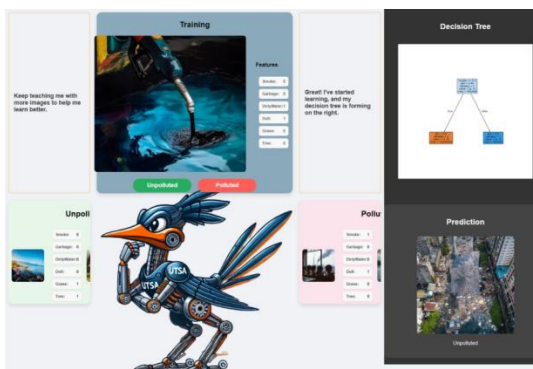
PolluSpot

Tawakalitu Afoluwaso Giwa



ROWDY AI Save the Earth

Elif Ercek



Train an AI system to recognize polluted and unpolluted images and see the results of your training in the system's own analysis of new images.

Race Against AI

Travis Irwin and Angel Bernal



Compete against AI in a race where the faster you can draw objects which reach the required threshold, the faster your car will go. Uses Google Teachable Machine to do the drawing recognition.

Tech Park 3D Construction

Shahzaib Zaveri and Andres Marin



Next Object
Repeat
Reconstruction
Finish

Please attempt to rotate the object...

Select images of the objects such as pool, volleyball field, trees, swings to populate a playground; create your own 3D model by showing images of real objects to the computer via webcam.