



Supporting AI Literacy through Informal STEM Education

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AI is everywhere.

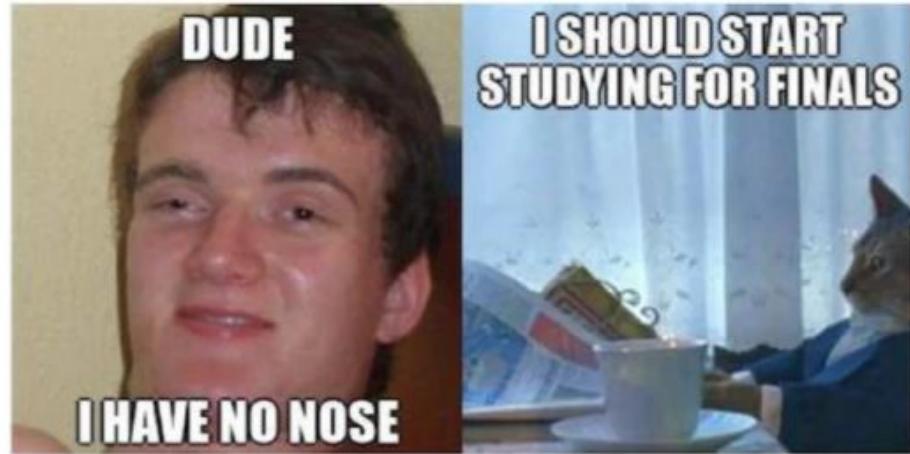
How do we get youth excited about AI?

ONE DOES NOT SIMPLY



**GENERATE MEMES USING DEEP
LEARNING**

memegenerator.net



Source: “Dank Learning”, see <https://arxiv.org/pdf/1806.04510.pdf>

We are more than just memes.

Hey Google, talk to

MixLab

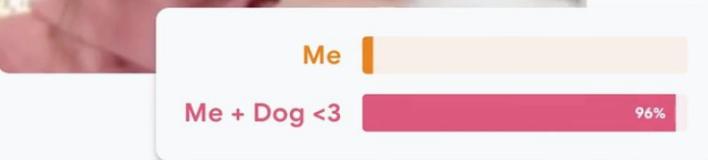
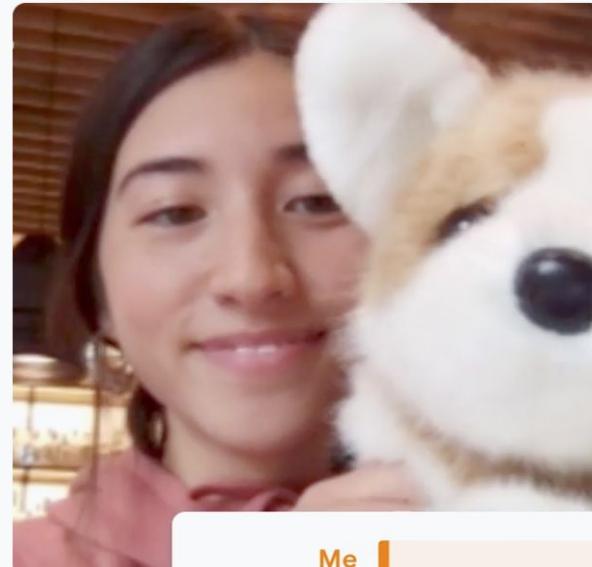
Try saying:
“Give me a punk bass.”



Teachable Machine

Train a computer to recognize your own images, sounds, & poses.

A fast, easy way to create machine learning models for your sites, apps, and more – no expertise or coding required.



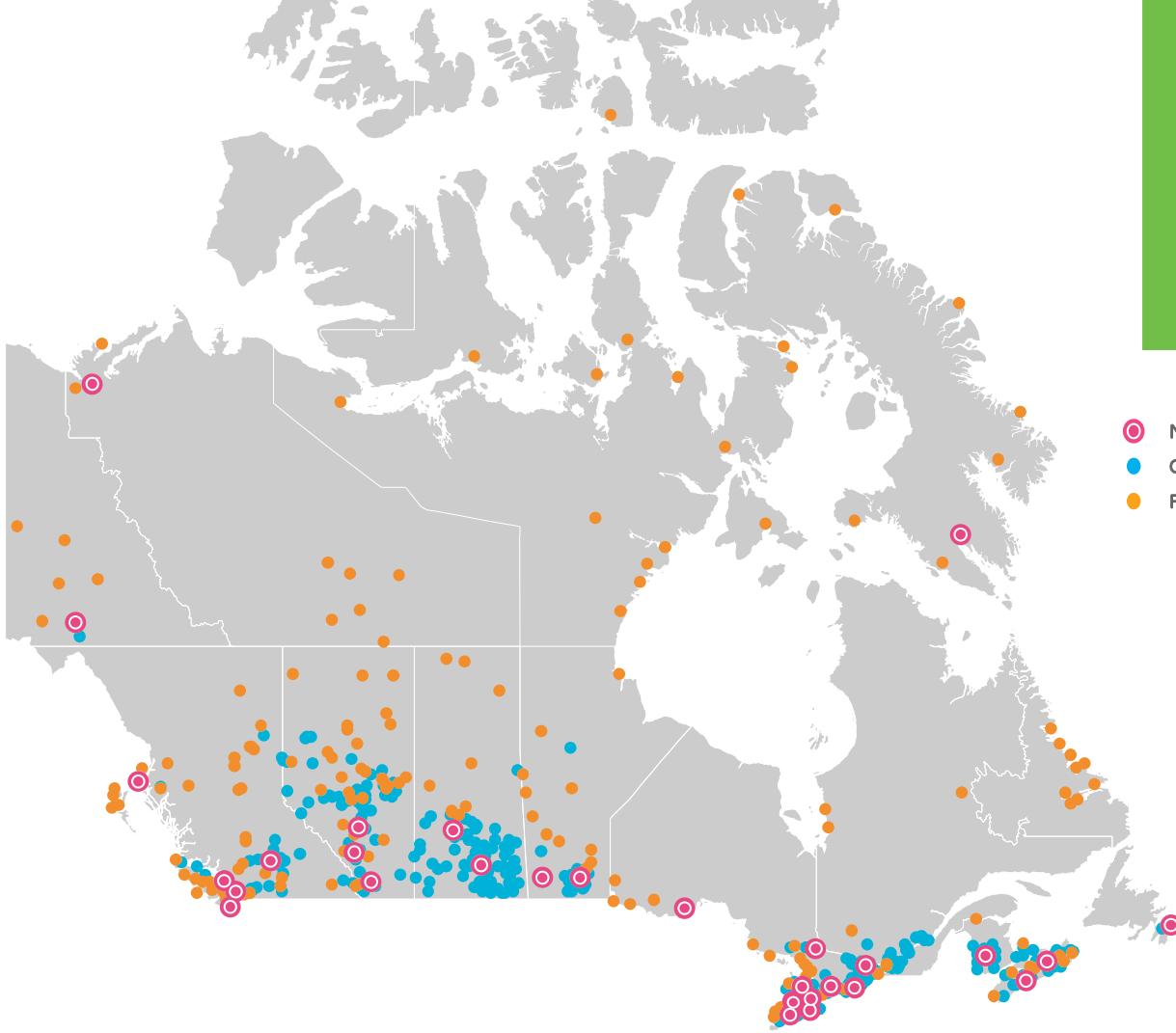
Get Started



WORLD

Where are these AI-savvy kids?

**500+ COMMUNITIES
250,000 YOUTH
EVERY PROVINCE
AND TERRITORY**

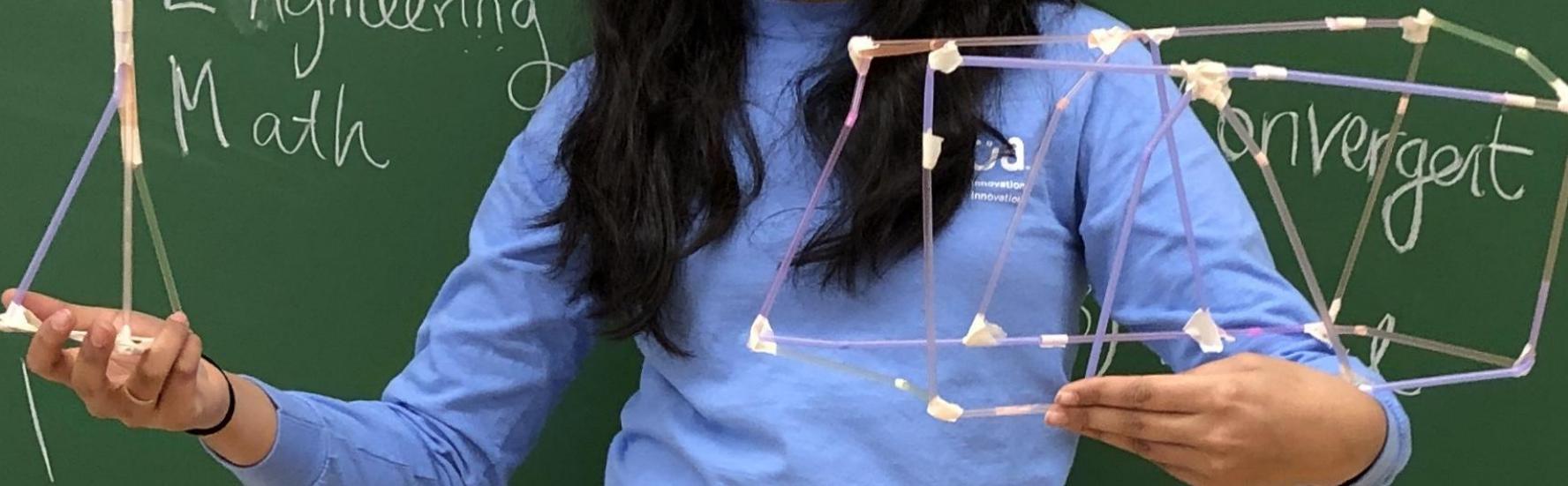


In-School Activities

① Divergent

Science
Technology
Engineering
Math

Convergent



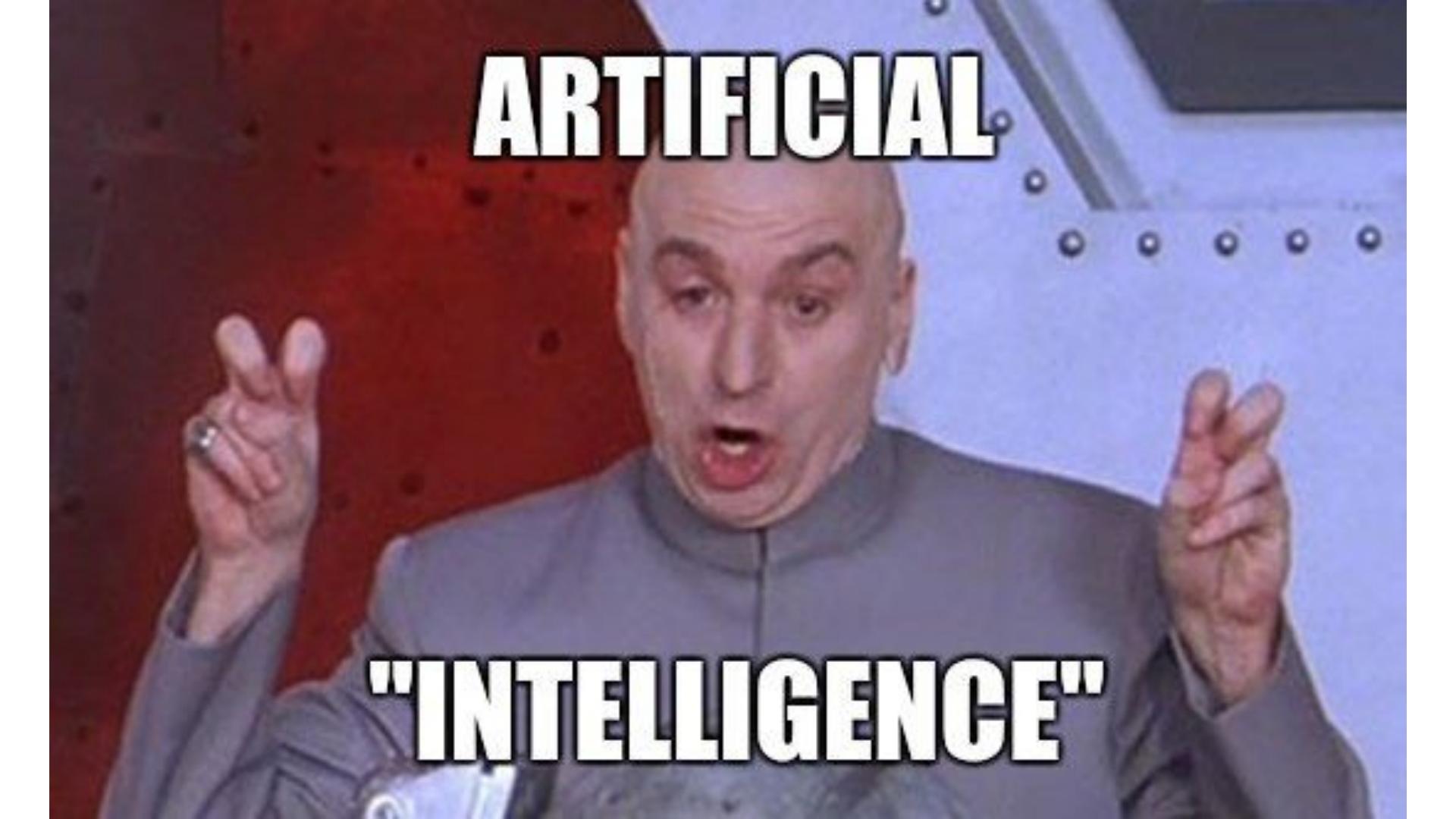
Mobile Workshops



Camps & Clubs



...and what are you
teaching them?

A man with a balding head and a shocked expression, wearing a grey Starfleet uniform, stands with his hands raised. He is positioned in front of a red wall on the left and a blue wall with circular rivets on the right.

ARTIFICIAL

"INTELLIGENCE"

Actua's Artificial Intelligence (AI) for Education Framework

Created with support from Google.org and CIRA, and informed by research from Google's Applied Digital Skills Team, Google Brain, AI4K12.org, CSTA, Microsoft, AI4ALL, and K-12 educators working in AI.

THEME	DATA	PERCEPTION	REPRESENTATION & REASONING	LEARNING	NATURAL INTERACTION	SOCIETAL IMPACTS
Big Idea	Understanding data is foundational to artificial intelligence (AI).	Computers sense and perceive the world around them.	AI creates models to represent other concepts and uses these models for reasoning.	Machine learning happens with data over time.	Interaction between AI and humans mimics communication between people.	AI can impact society in both positive and negative ways.
Investigations	What is data, and how do humans use it? What are types of data used in data science? In what ways is data applied in careers and society?	How do machines use sensors to perceive data? How do machine learning tools classify data? What are the limitations of machine perception?	How is data used in AI models? How can models represent other concepts? How do machine models inform decision making?	How do algorithms demonstrate learning? What are neural networks? How does training data influence machine learning?	What does machine-human interaction look like? How do machines understand natural language? What is affective computing; what is consciousness?	What ethical considerations arise when we use and create AI in society? What biases exist in AI algorithms? How can AI be leveraged to face global challenges?

#ActuaAI for Youth

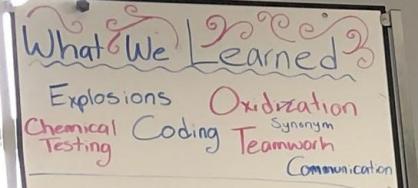
- 20 by 2020!
- Recommended progression
- STEM connections



Is this for marks?

When someone asks why you never stops talking about machine learning





Artificial Intelligence



A woman in a blue t-shirt with the 'actua' logo is standing and smiling. She is wearing a white glove on her right hand.





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Jeunesse · STIM · Innovation



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