

The background features a light blue dashed line forming a large circle. Various colored circles are scattered around: a large teal circle with a white center in the top left, a small teal circle next to it, a large lime green circle in the top right, a small lime green circle with a dashed outline next to it, a small pink circle, a large orange circle, a large yellow circle with a white center in the bottom right, a large green circle with a white center in the bottom left, a small yellow circle, and a large lime green circle with a dashed outline in the middle left.

# Zhorai:

# A Conversational Agent

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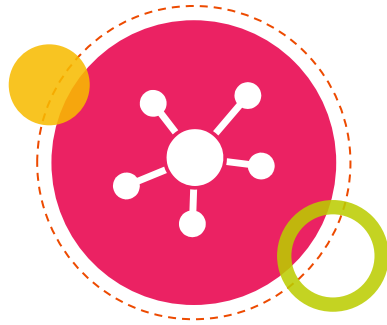
# Meet Zhorai!

- Interactive, intelligent conversational agent
- Workshop format
- **3rd to 5th graders**

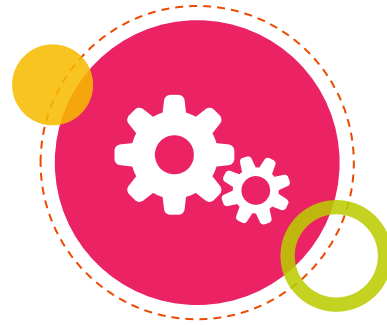
# Big AI Ideas



Natural  
Interaction



Learning



Representation  
& Reasoning



Societal Impact

# Motivation

Conversational  
AI becomes  
commonplace  
technology

Explore AI  
through natural  
interaction

Bring  
transparency to  
tools we  
engineer



# Education

## Objectives

1. How does an agent learn new information?
2. How does the agent represent language?
3. How do machines classify concepts?
4. What are the limitations of ML and why?
5. What are the social implications?

## Assessment

1. Individual student worksheet
2. Testing understanding through discussion

# Activity Breakdown

	Name	Description	Estimated Time (min)	Online/Unplugged/ Discussion
1	Warm Up	Pre-Assessments + Introduction to Zhorai	10	Online, Unplugged
2	Module 1	Understanding Knowledge Representation in Machines	10	Online, Discussion
3	Module 2	Teaching New Knowledge to Machines	10	Online, Discussion
4	Module 3	Witnessing Machine Learning Classification	10	Online, Discussion
5	Module 4	AI and Ethics Discussion	15	Discussion, Unplugged
6	Cool Down	Post-Assessments	5	Unplugged



# Live Demo



# Activity Resources

- Teacher guide
- Laptop (3-5 students per device) with a working microphone and speaker
- Pre-activity assessment
- Post-activity assessment
- Exercise Worksheet
- Pencils





# Technical Components

- Speech Recognizer
- Speech Synthesizer
- Semantic Parser
- Conceptual Word Embedder
- Word Embedding Comparator
- Website

# Project Status



# Future Work



Thanks!



Any questions?