

Inside Multimodal Models

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Speaker Bio



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Introduction



We are living in the era of AI

2x

AI private investments **doubled**

50%

50% of organizations have **adopted** AI in at least one business area

70%

70% of employees are ready to **embrace** AI



Multimodality is here

Language

Speech

Vision



Multi modality.

We can grasp
multiple modalities,
why can't AI?



Modalities:

Language



GPT understands and generates natural language

Speech



Whisper understands and generates spoken language

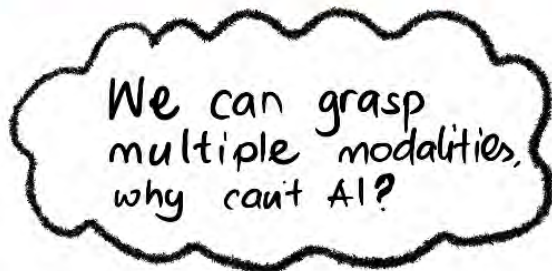
Vision



generates new images from textual prompts



Multi modality.



vision
language
speech

Modalities:

Language



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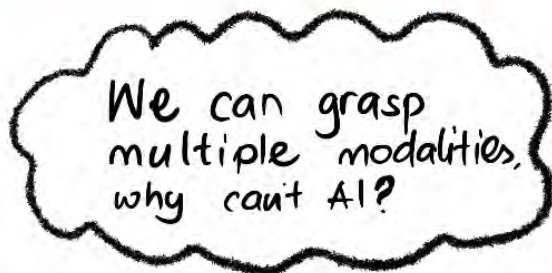
Vision



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Multi modality.

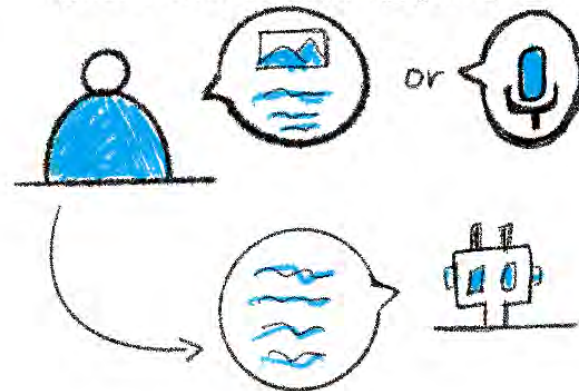


Large Multimodal Models: (LMM.)



LMMs can process multiple data types e.g. text, images audio and vision

GPT-4 Turbo with Vision
reason across various scenarios



Definitions

Attention Mechanism

Transformer Architecture



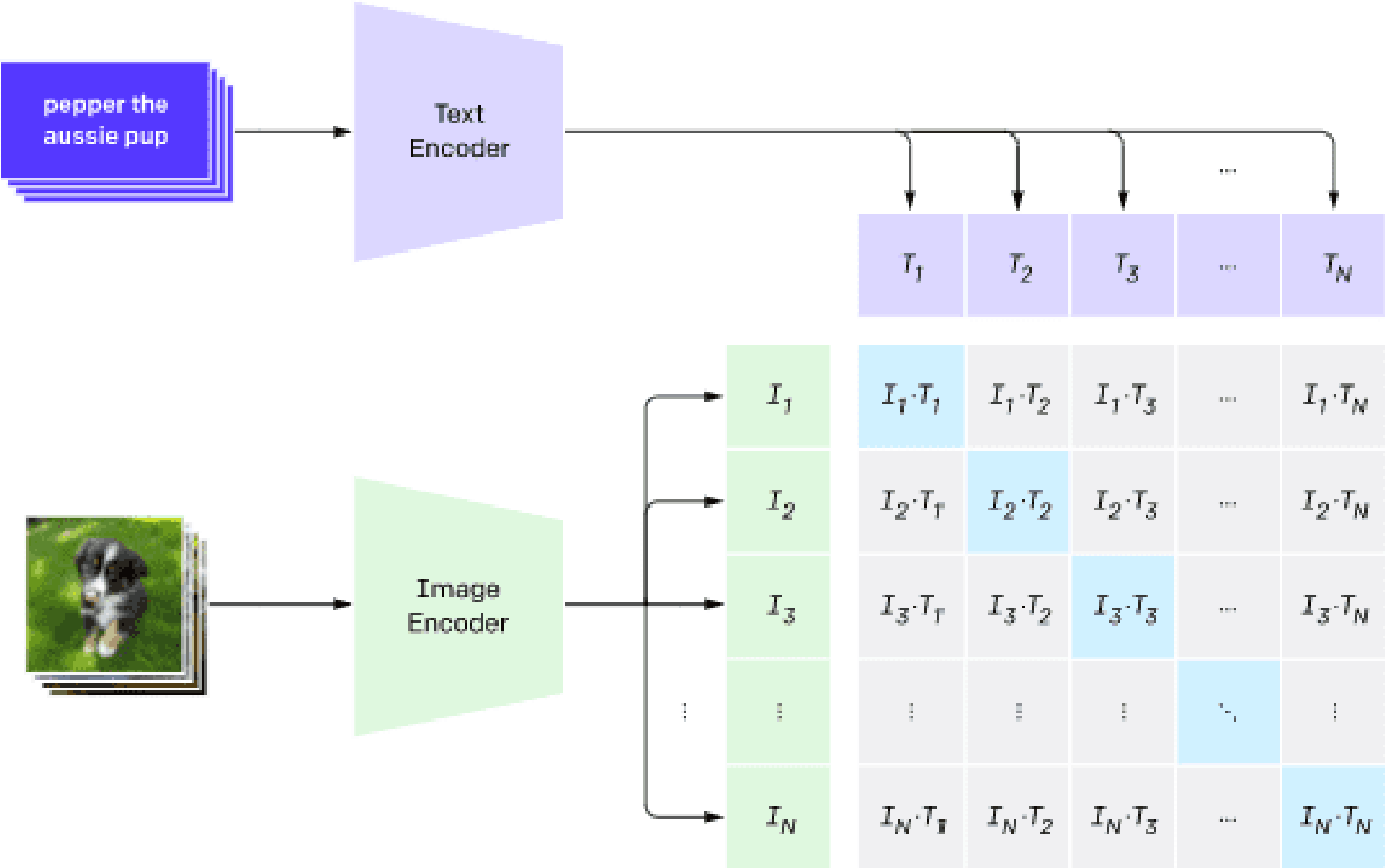
Multimodal Models

CLIP (Contrastive Language-Image Pretraining)

DALL.E



CLIP (Contrastive Language-Image Pretraining)



DALL.E

Prompt

Photo realistic image of the planet Nura from space

Response



Multimodality in Action



Azure OpenAI Service

Large pretrained foundation AI models
custom-tunable with your data

GPT-4

Whisper

DALL·E

GPT-4o

Demo

GPT-4o



Microsoft's Responsible AI principles



Fairness



Reliability
& Safety



Privacy &
Security



Inclusiveness



Transparency



Accountability

Research

Policy

Engineering

Join the Azure AI Community on Discord

Connect with fellow enthusiasts, engage with Microsoft experts and MVPs, discuss your favorite sessions and session resources, and delve into AI discussions. Your space to ask, share, and explore!

aka.ms/AzureAI/Discord



Get started with Generative AI

Learn the fundamentals of building Generative AI applications with our comprehensive course by Microsoft Cloud Advocates.

aka.ms/genai-beginners



Thank You!

