

# AI Leading Transformative Experiences

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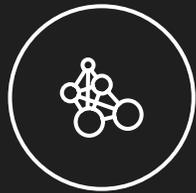
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 @saalur





# Amplifying human ingenuity with intelligent technology



## Reasoning

Learn and form conclusions  
with imperfect data



## Understanding

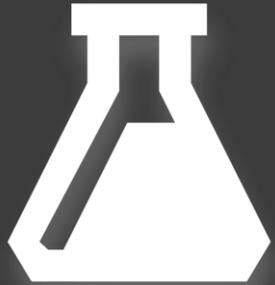
Interpret meaning of data  
including text, voice, images



## Interacting

Interact with people  
in natural ways

## The Jargons



Artificial Intelligence

Machine Learning

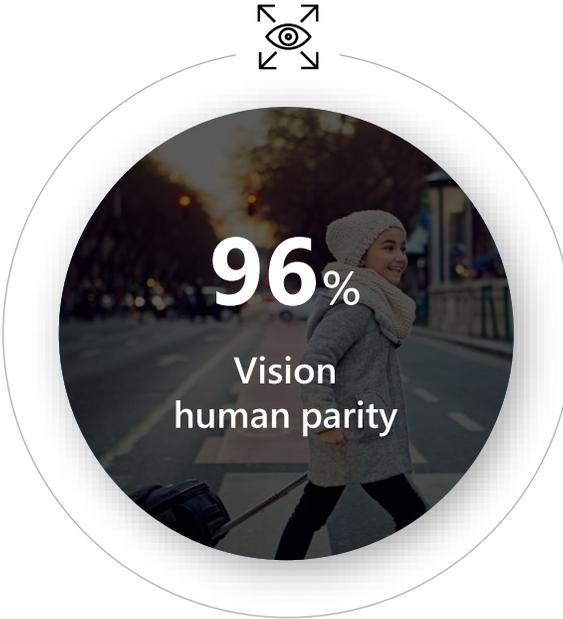
Give computer the ability to learn without being explicitly programmed

Deep Learning

Algorithm inspired by how the human brain works

# AI is getting Democratized

# Microsoft AI advancements



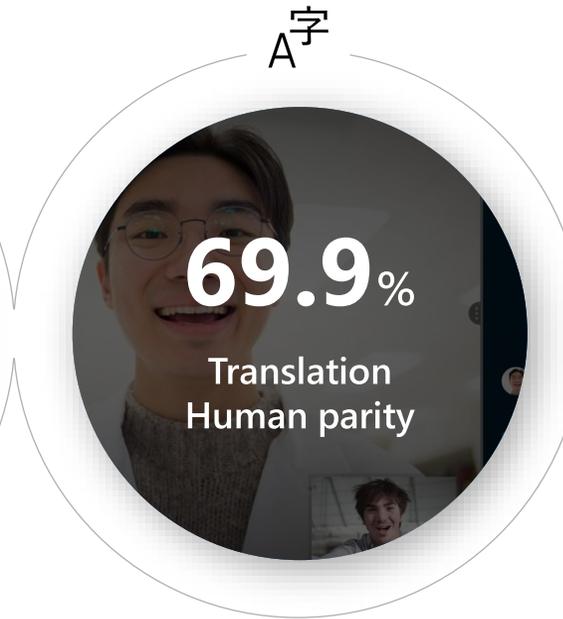
**2016**

RESNET Vision Test  
152 Layers



**2017**

SwitchBoard Speech  
Recognition Test



**2018**

MT Research  
System



**2018**

SQuAD Reading  
Comprehension Test

## Reaching human parity

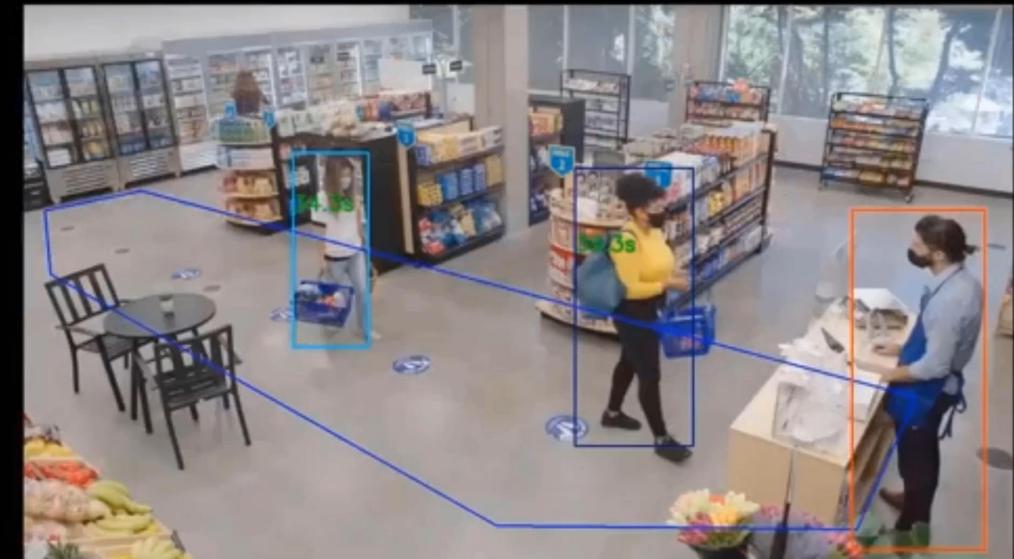
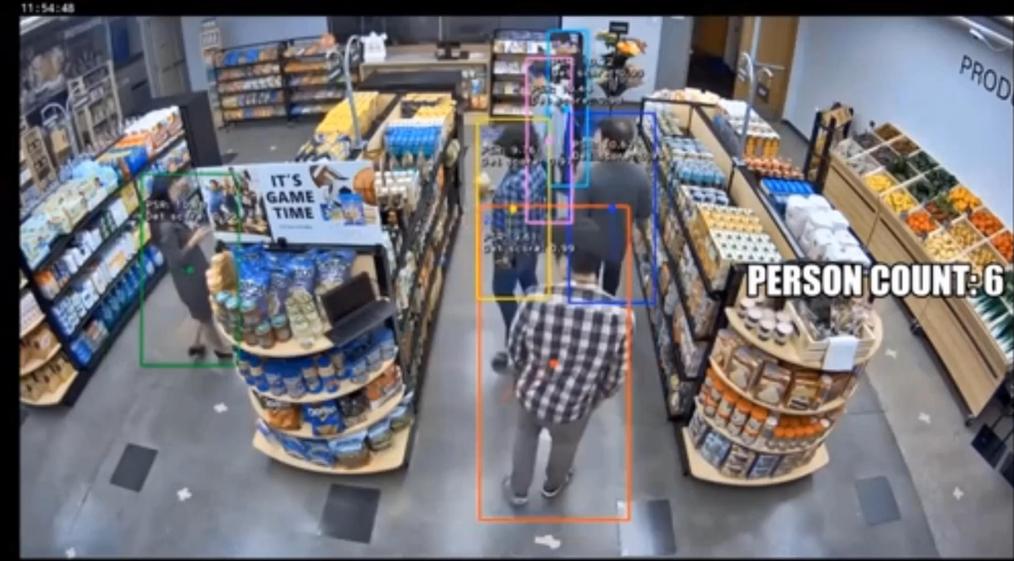
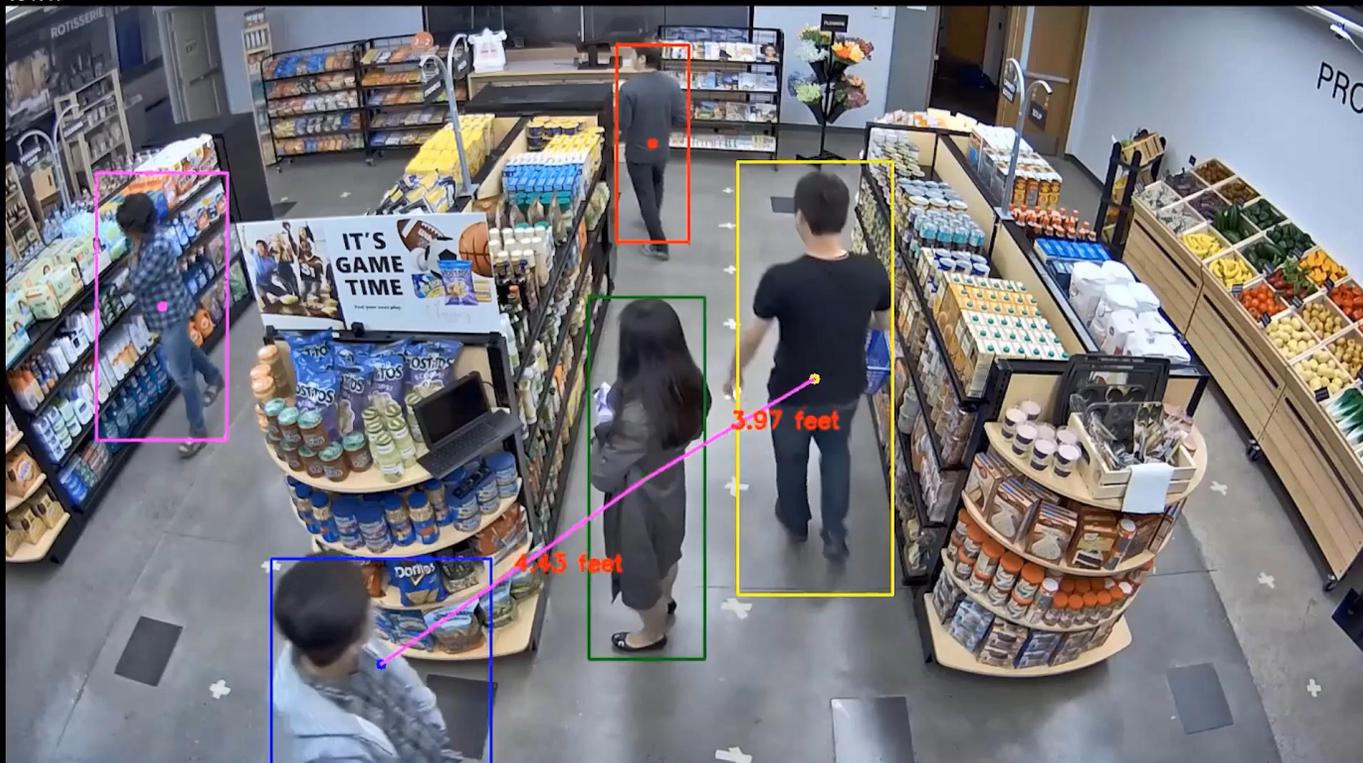
# AI breakthroughs

- 
- 2016 • Object recognition  
Human parity
  - 2017 • Speech recognition  
Human parity
  - 2018 • Machine reading comprehension  
Human parity
  - 2018 • Machine translation  
Human parity
  - 2019 • Conversational QnA  
Human parity
  - 2020 • Image captioning  
Human parity

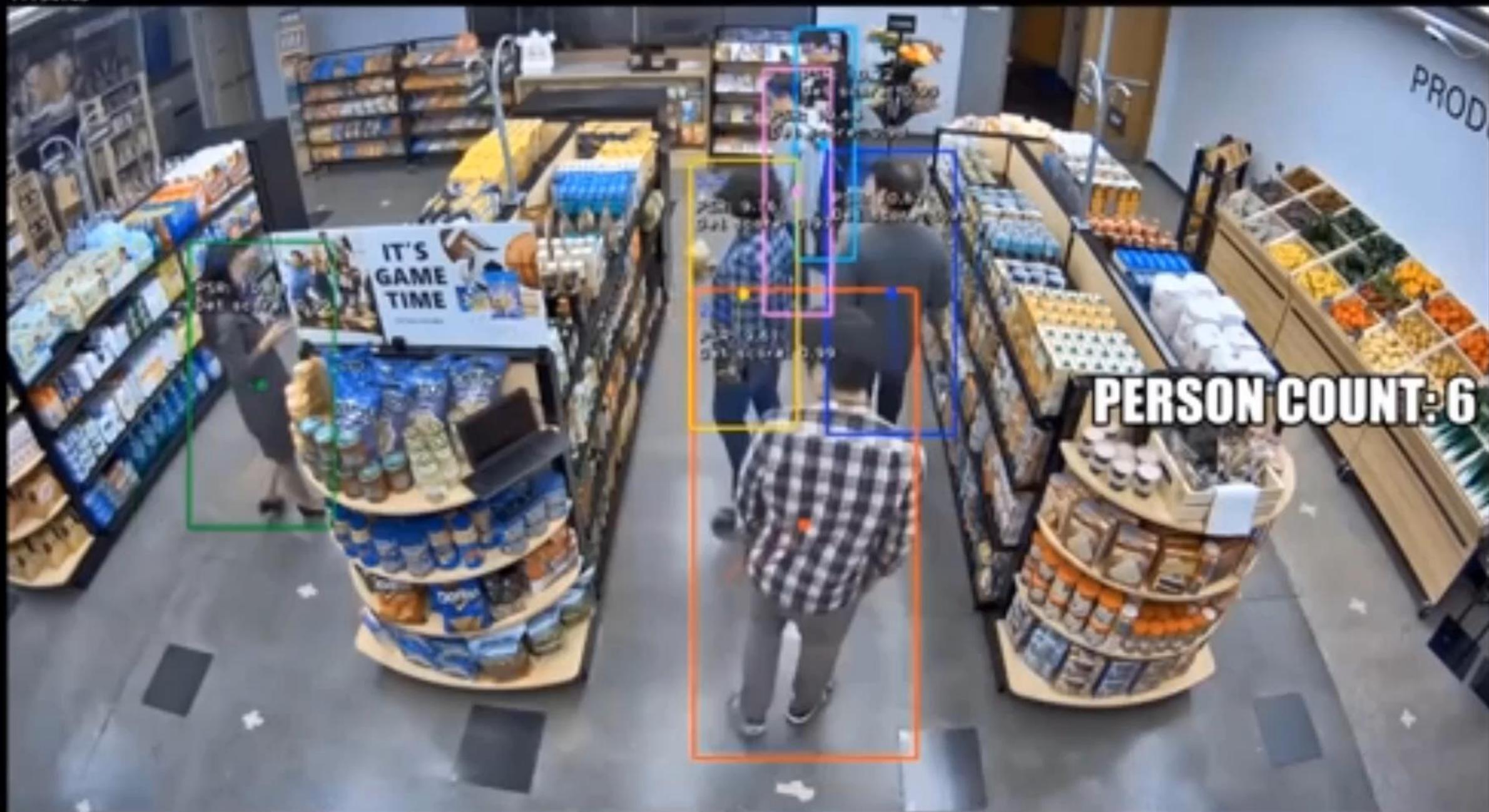
# SPATIAL ANALYSIS

{ Cognitive in Containers }

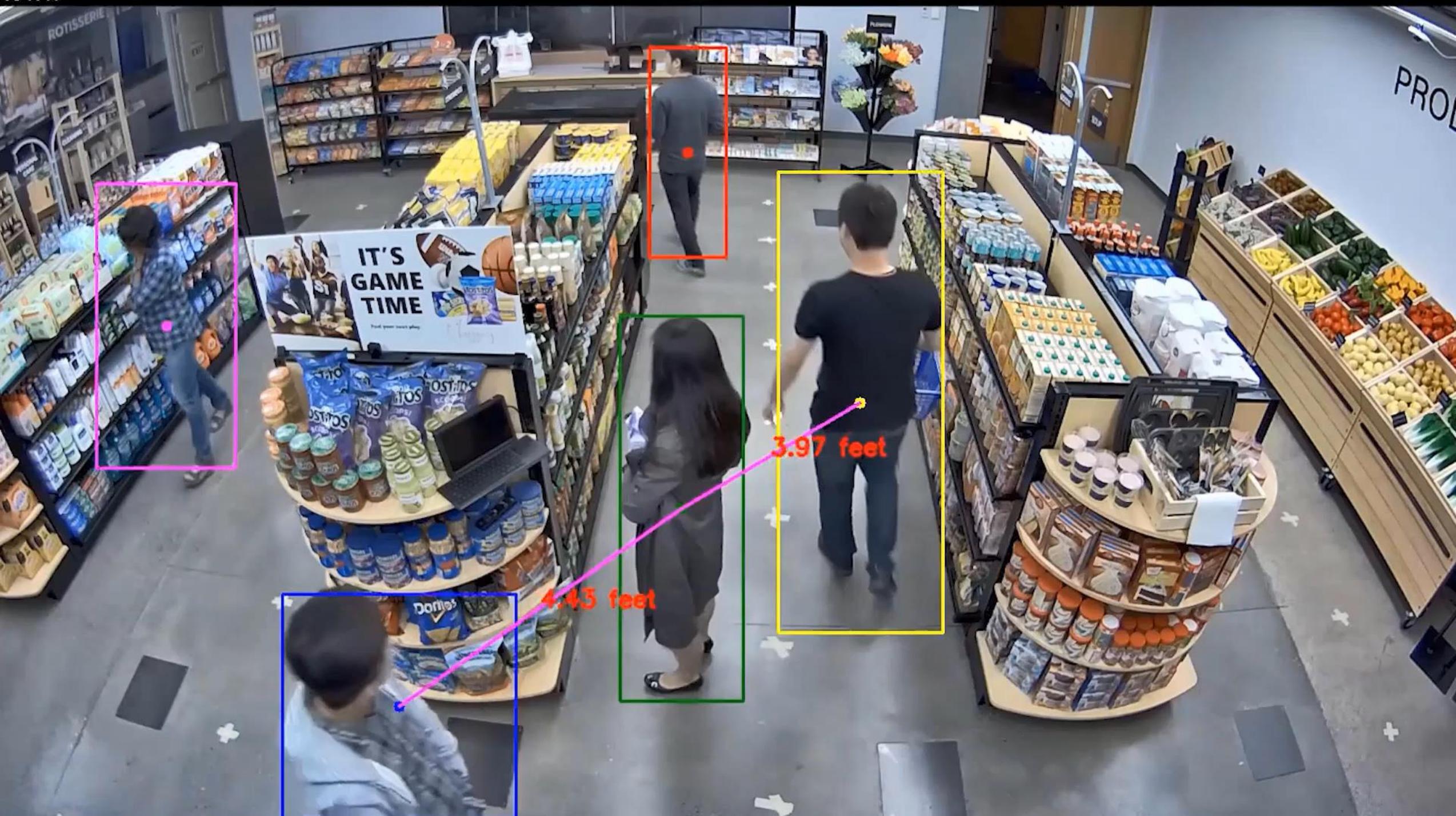
## Smarter Surveillance for enhanced Citizen Safety



11:54:48



**PERSON COUNT: 6**



Person in pink box

Person in red box

Person in yellow box

Person in green box

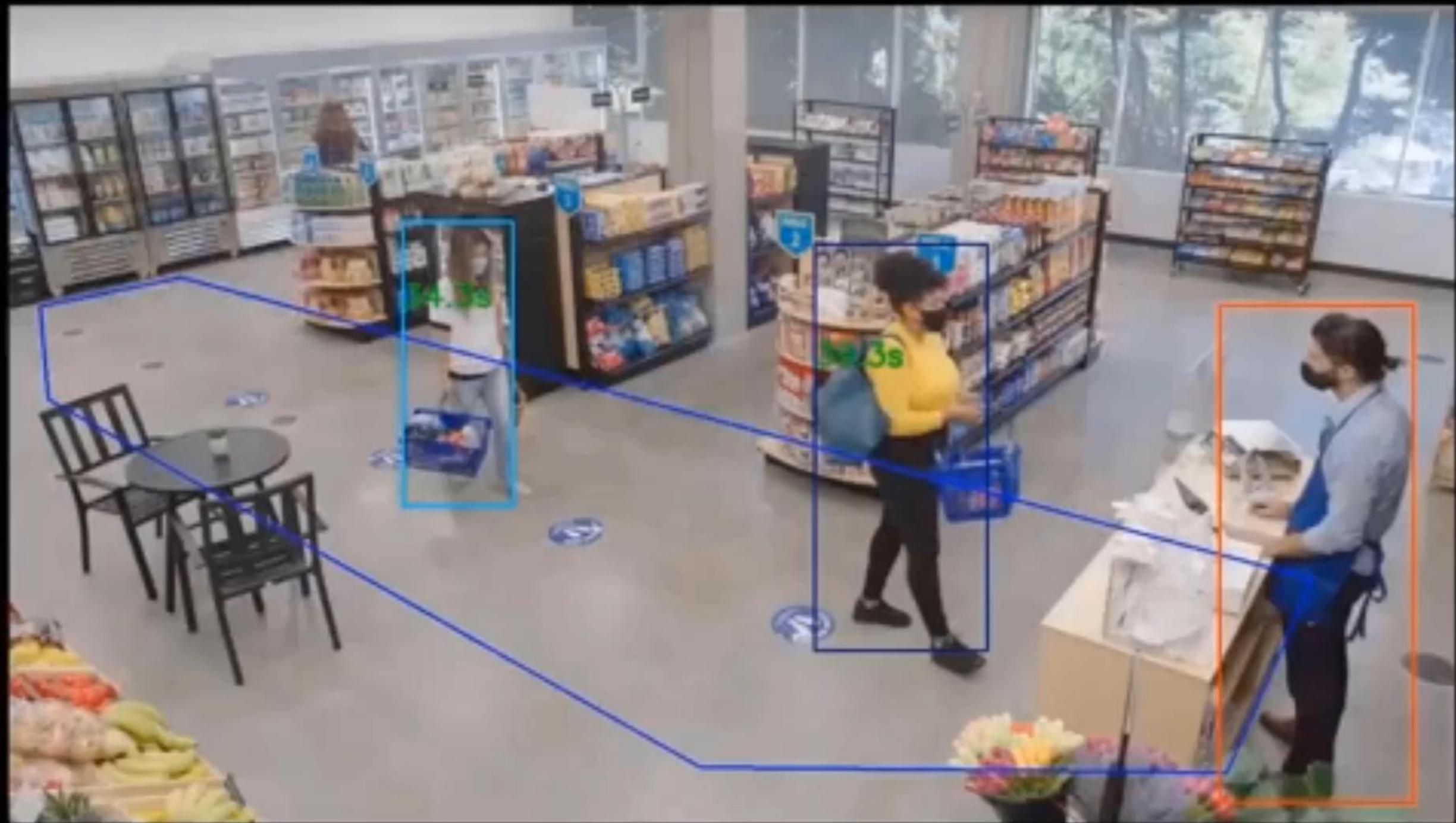
Person in blue box

IT'S GAME TIME  
Feed your team's glory

PRODUCE

3.97 feet

4.43 feet



Few Scenarios



Conversational Platform

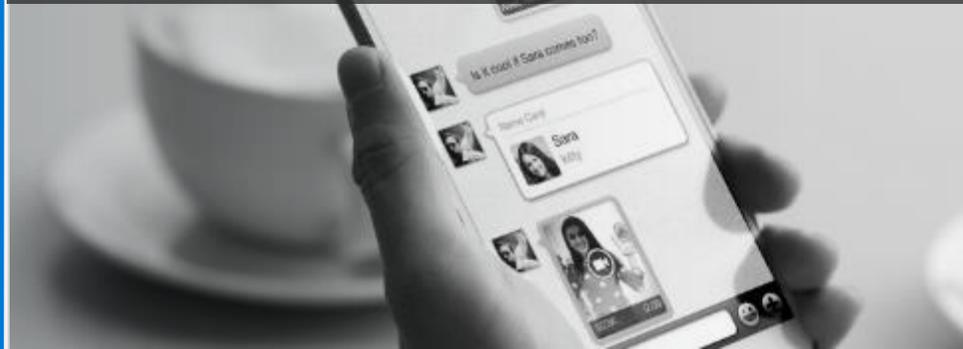


Cognitive Services API

'AI' in ACTION

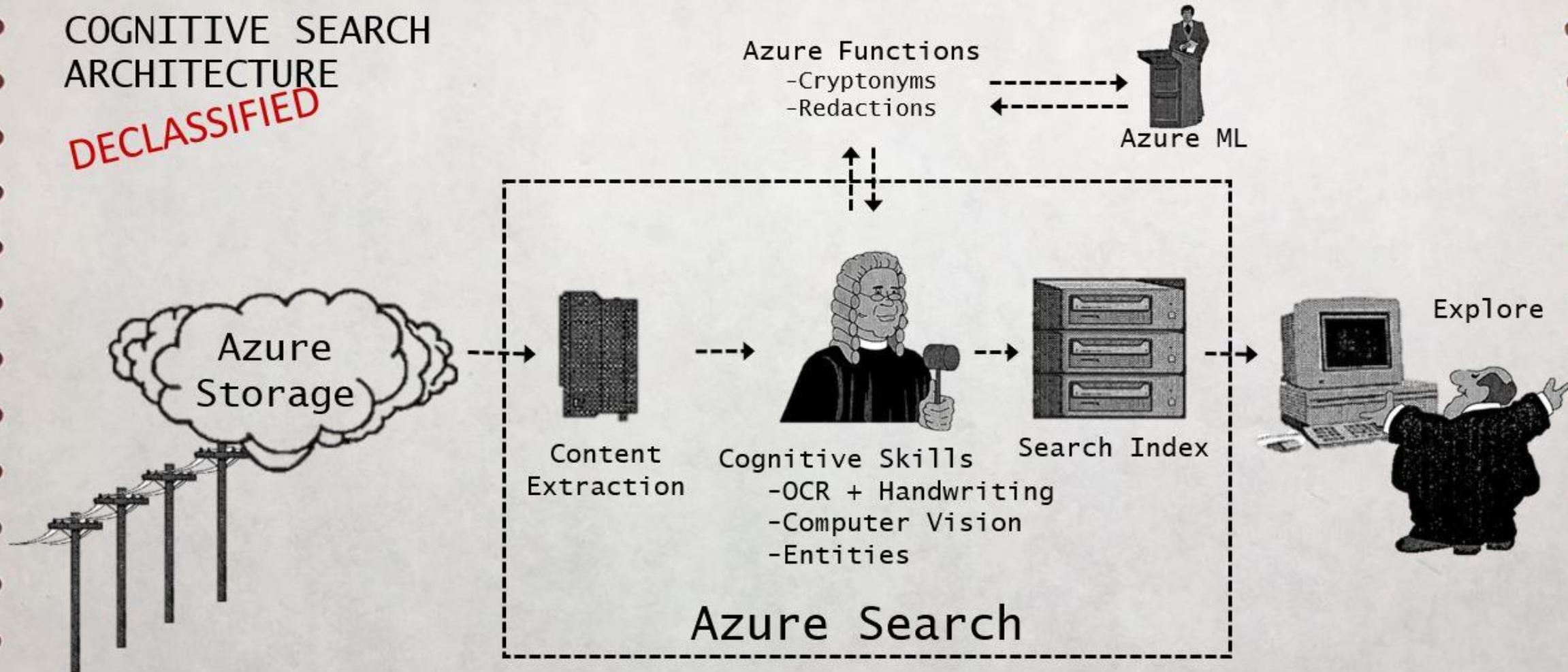


Machine Learning



JFK FILES  
COGNITIVE SEARCH  
ARCHITECTURE

DECLASSIFIED



# Thank You

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