

# Artificial Intelligence and what it means for Government

DIR Technology Forum  
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Presented By: Noopur Gupta



Blue Pill or Red Pill ?





# Noopur Gupta

## I am currently:

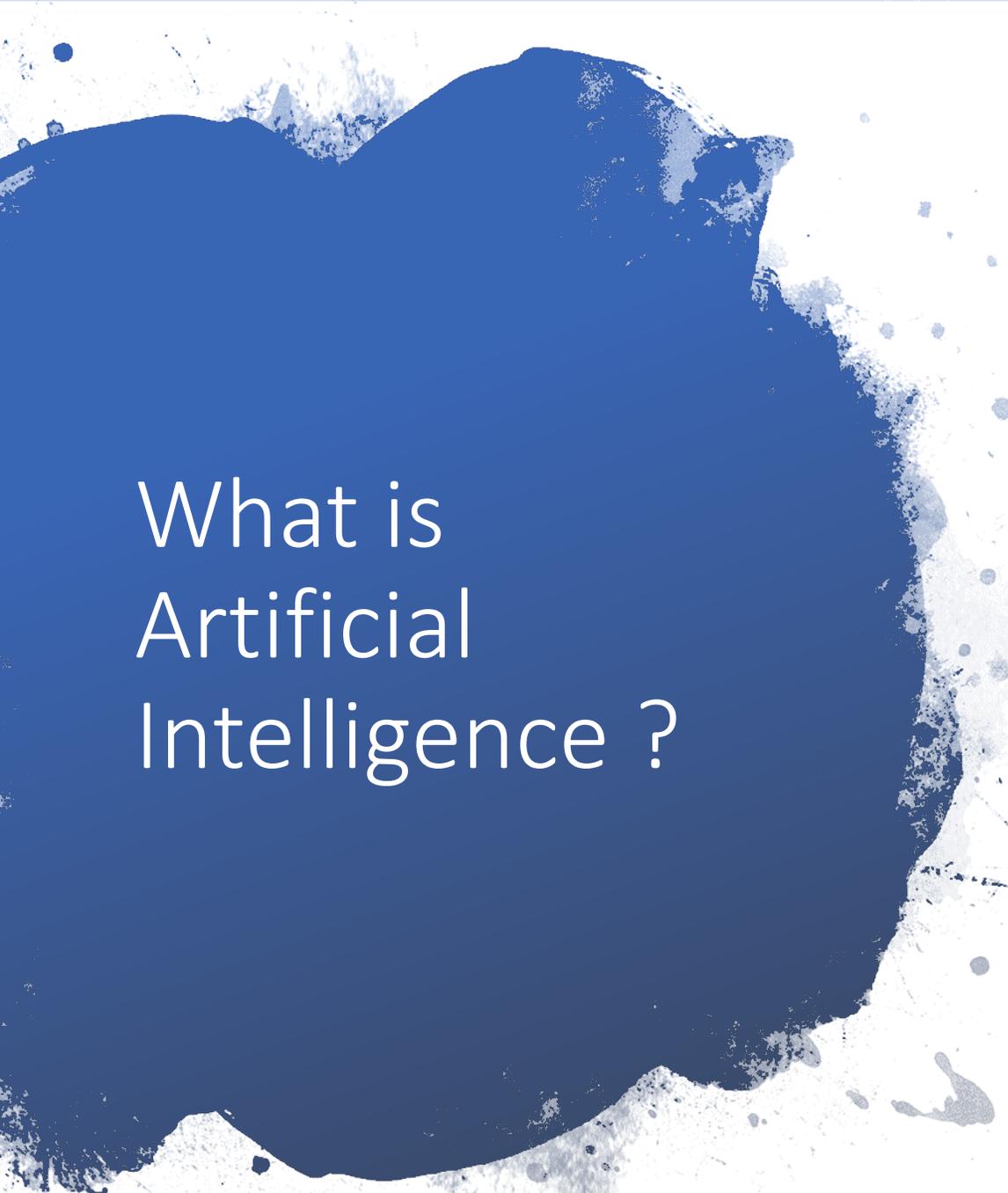
- Sr. Systems Engineer at Travis County.

## My current AI interests are:

- Pursuing Masters in Computer Science

## Connect with me:

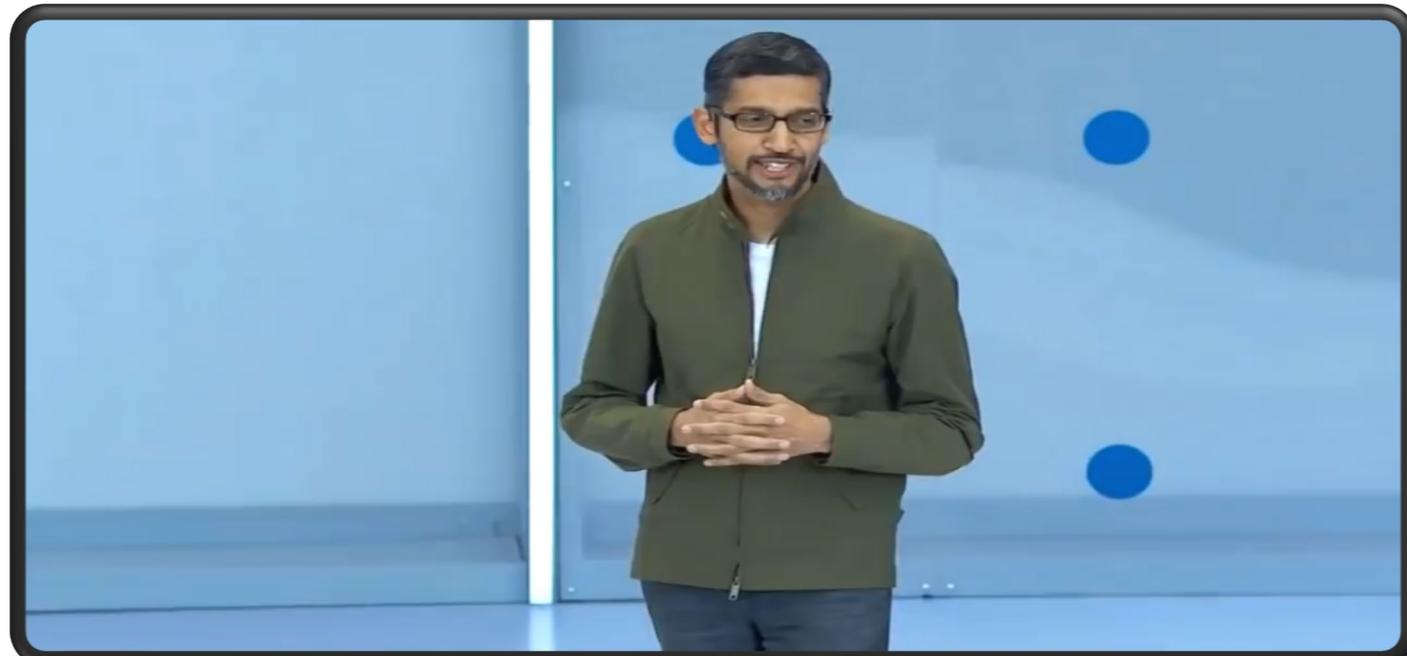
- Instagram : @noopurgupta01
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What is  
Artificial  
Intelligence ?

Computers acting in a  
way that seem  
intelligent

# Google Duplex: A.I. Assistant Calls Local Businesses To Make Appointments





Will Artificial  
Intelligence  
replace humans ?



We're  
developing  
human-  
computer  
systems.

Google Search  
Engine

Wikipedia Bots

Which of these are AI problems ?

Answering	Answering questions on jeopardy
Configuring	Configuring the dimensions for the basement of a new house
Tying	Tying Shoelaces
Deciding	Deciding on a route to a new destination
Making	Making sense of a news broadcast
Designing	Designing a robot that walks on water
Establishing	Establishing whether a flower pot can be used as a drinking cup.
Deciding	Deciding whether or not a new animal is a bird

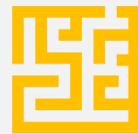
# Fundamental Conundrums of AI



Machines or AI Agents have limited resources.



The world is dynamic but knowledge is limited.



Problem solving, reasoning and learning are complex but justification, explanation are even more complex.

# Raven's Progressive Matrices Test

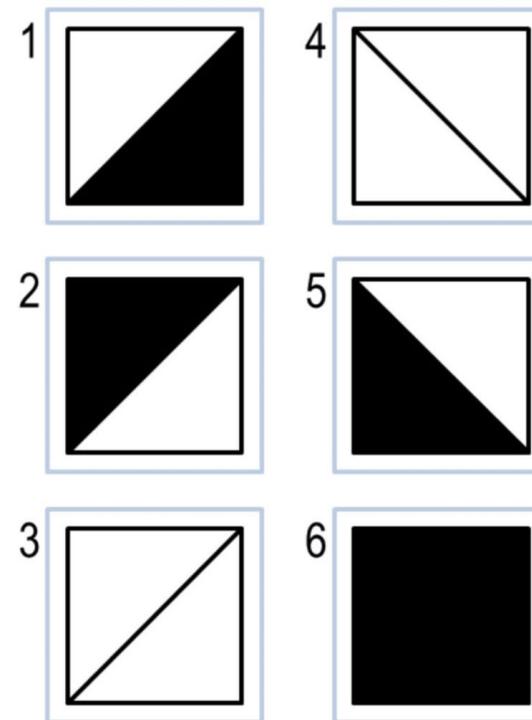
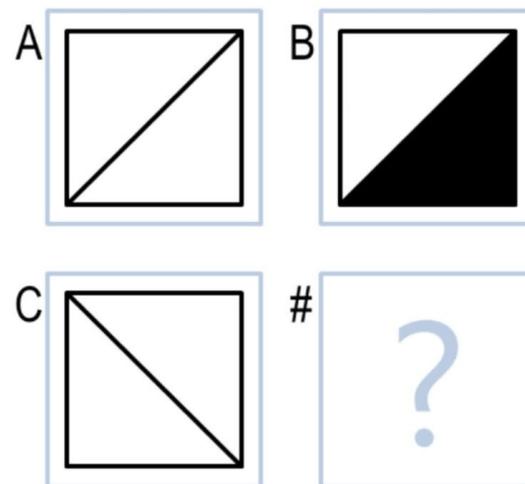
Basic Problem C-03

A	B	C	1	5
D	E	F	2	6
G	H	#	3	7
			4	8

[\$ python RavensProject.py  
 Basic Problem C-03: Agent's Answer=6 Actual Answer=4

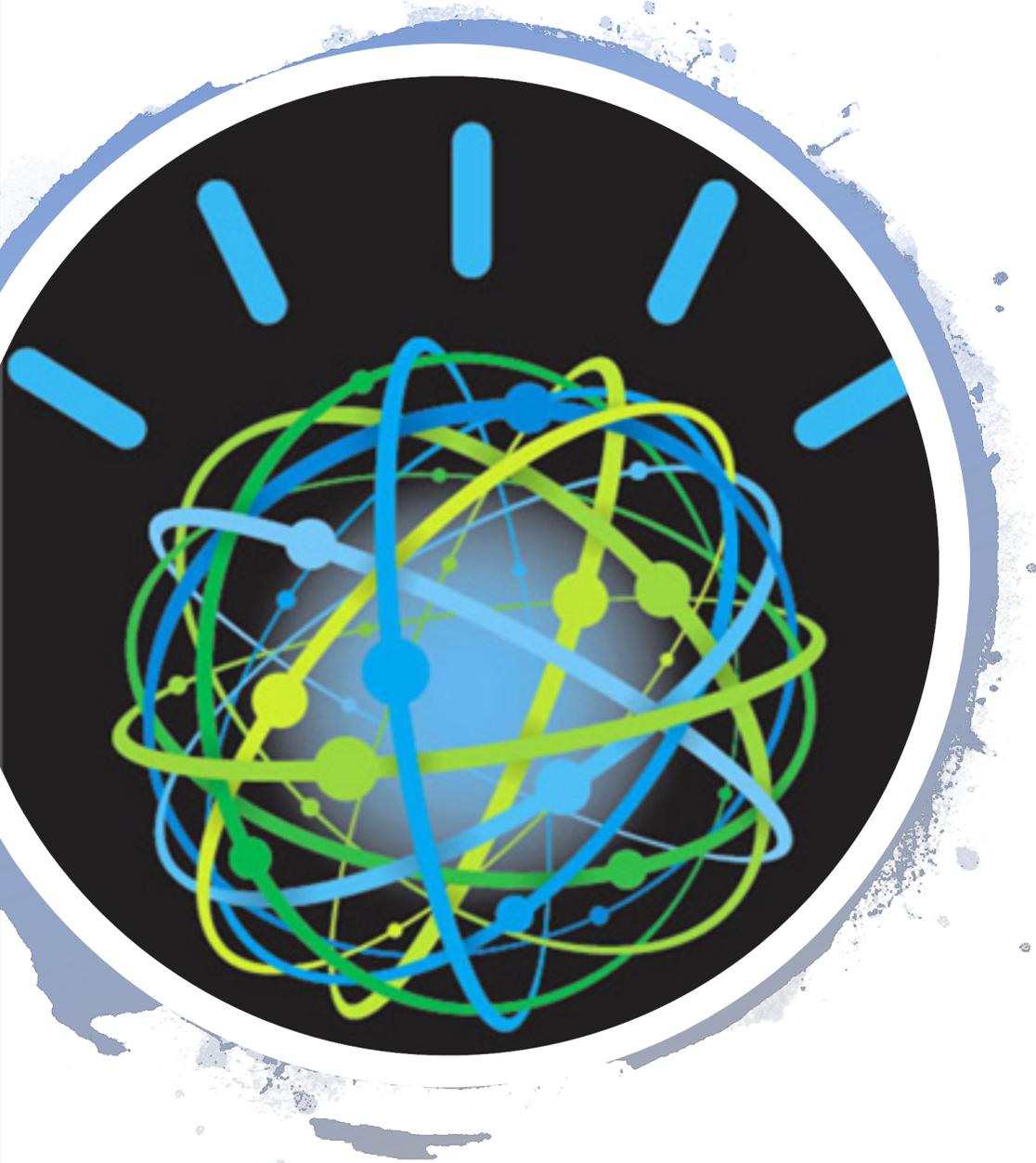
Raven's  
Progressive  
Matrices Test  
2

Basic Problem B-06



```
$ python RavensProject.py
```

```
Basic Problem B-06: Agent's Answer=5 Actual Answer=5
```



# Jeopardy and Watson Challenge





# Building AI powered organizations

From siloed work to interdisciplinary collaboration.

From experience-based, leader-driven decision making to data-driven decision making at the front line.

From rigid and risk-averse to agile, experimental, and adaptable

# What is Chatbot ?



Chatbot is software that can have conversations with humans and live online on chat platform.

## Why do we need chatbots ?

- Scale up operations
- Handle lot of queries
- For range of Identical products and queries
- Reduce mundane tasks

# Let's make QnA Chatbot



Login to Azure Portal <http://portal.azure.com> and <http://qnamaker.ai/>



QnAmaker.ai > Create a Knowledge Base> Create a QnA Service(Azure)> Refresh QnAmaker.ai > Create KB>Add QnA pair ->Save and Train>Publish > Save the Published Info



Azure Portal>Create a Resource → (AI+ Machine Learning)>WebApp Bot>All resources > Click on chatbot> Test in webchat



Example : <http://noopurgupta.com>

# Resources

[HTTPS://AISCHOOL.MICROSOFT.COM/EN-US/HOME](https://aischool.microsoft.com/en-us/home)

[HTTP://NOOPURGUPTA.COM](http://noopurgupta.com)

[HTTPS://COURSEA.COM](https://coursera.com)

[HTTPS://UDEMY.COM](https://udemy.com)



Any Questions ?



Thank you