

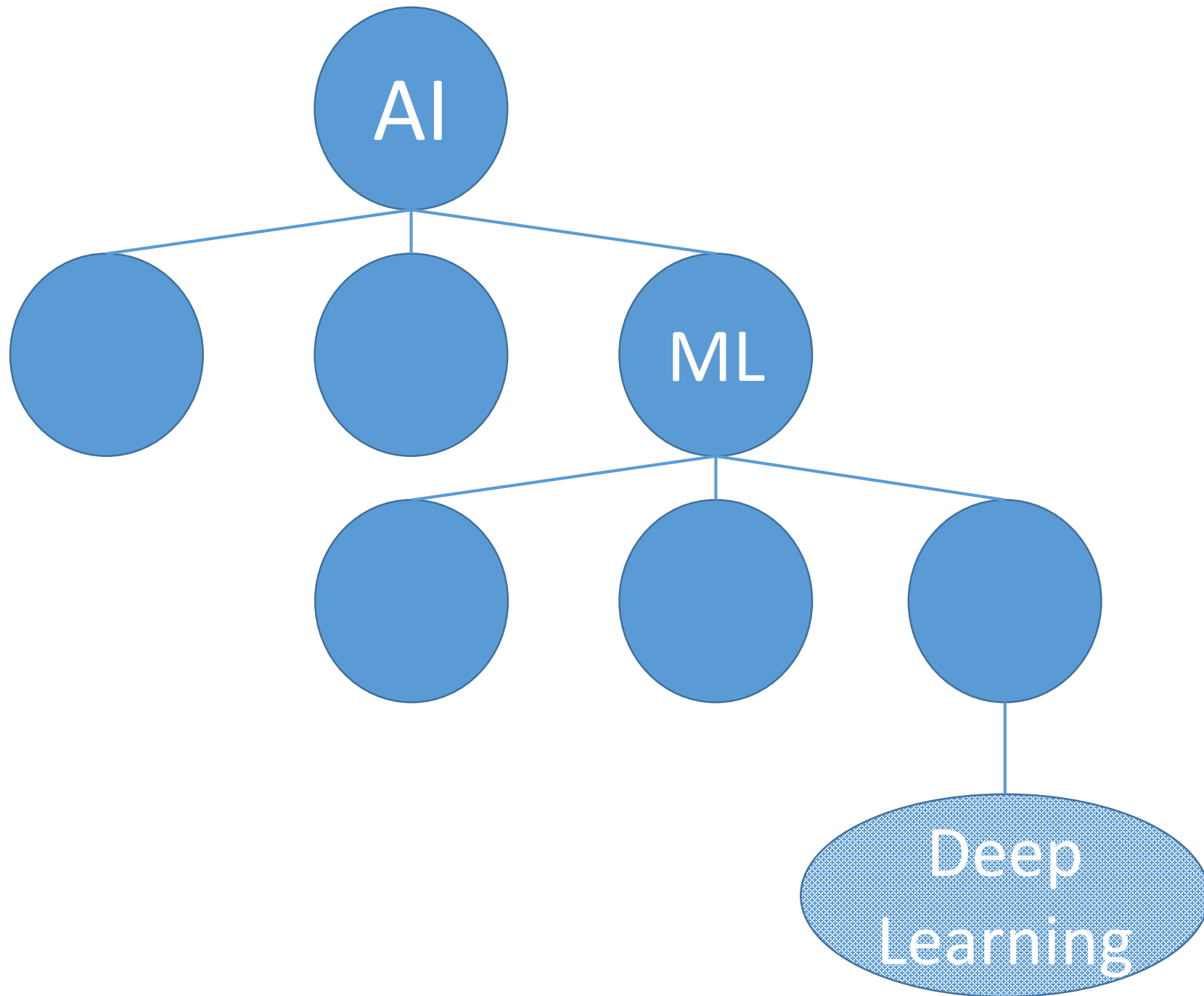
# AI 101

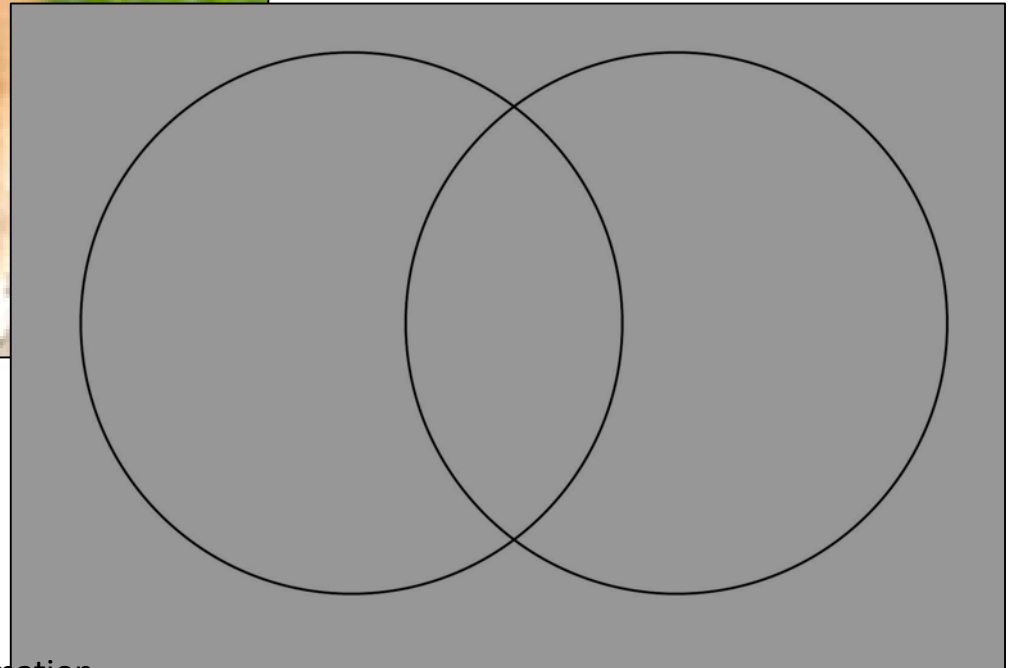
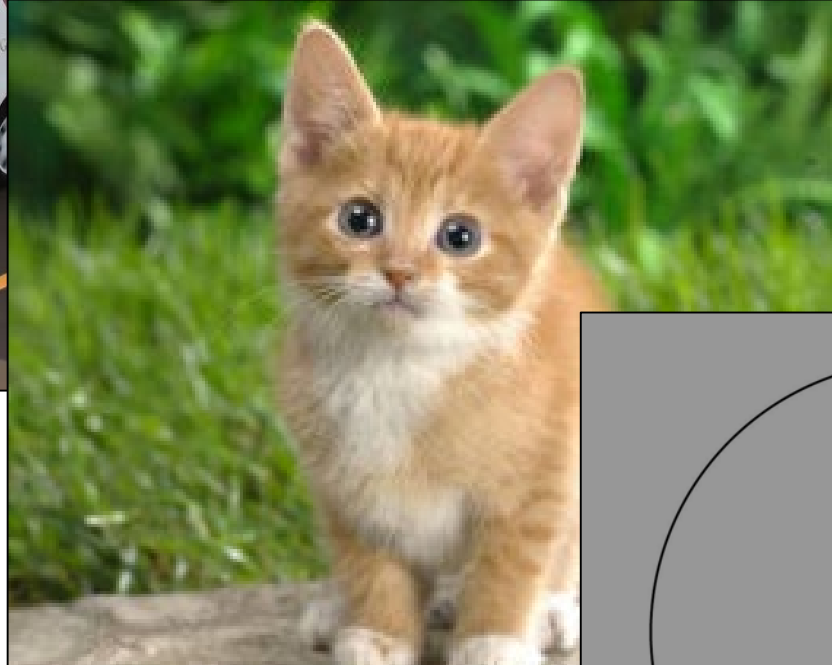
By Brandon Leshchinskiy

**Watch Mashable video about Google's AI-based personal assistant:**  
**[https://www.youtube.com/watch?v=JvbHu\\_bVa\\_g](https://www.youtube.com/watch?v=JvbHu_bVa_g)**

With the right data and the right model,  
machine learning can solve many problems.

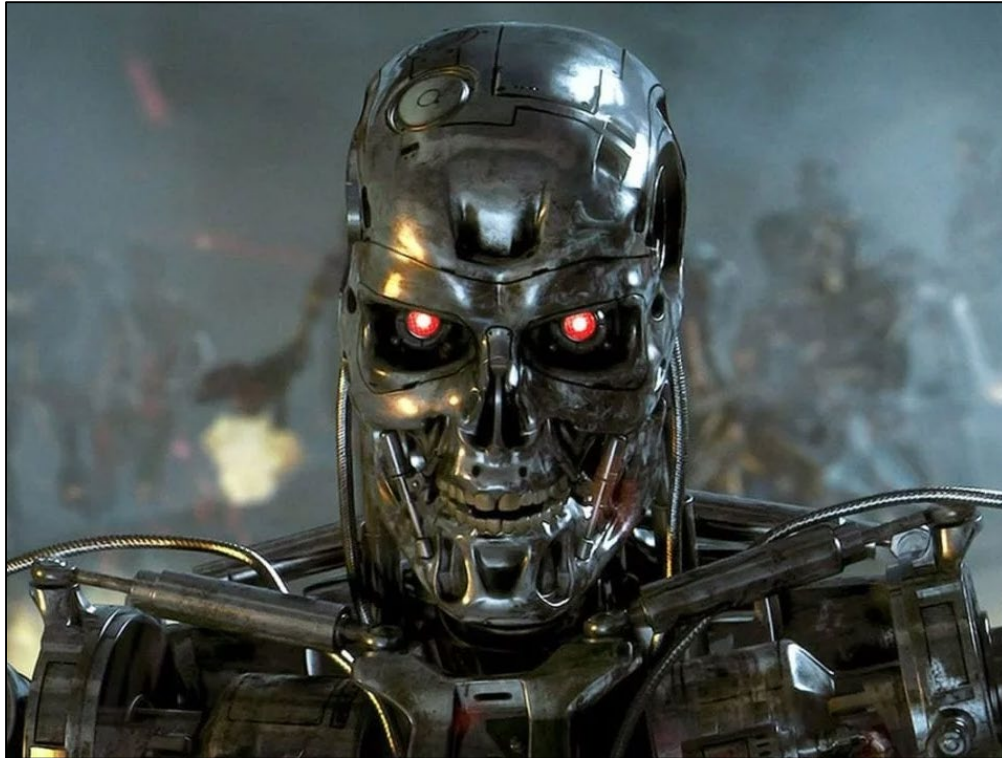
*But finding the right data and  
training the right model  
can be difficult.*





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# AI can be general or narrow.



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# AI can be general or narrow.



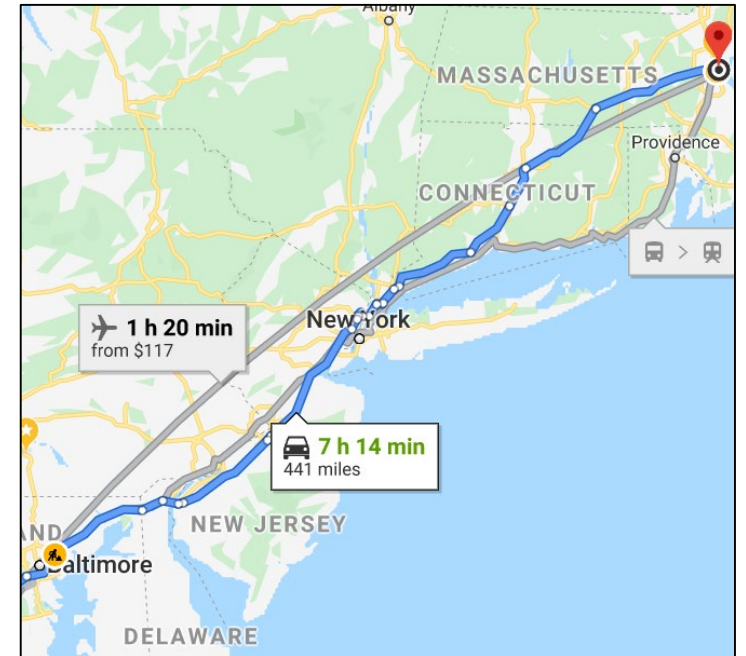
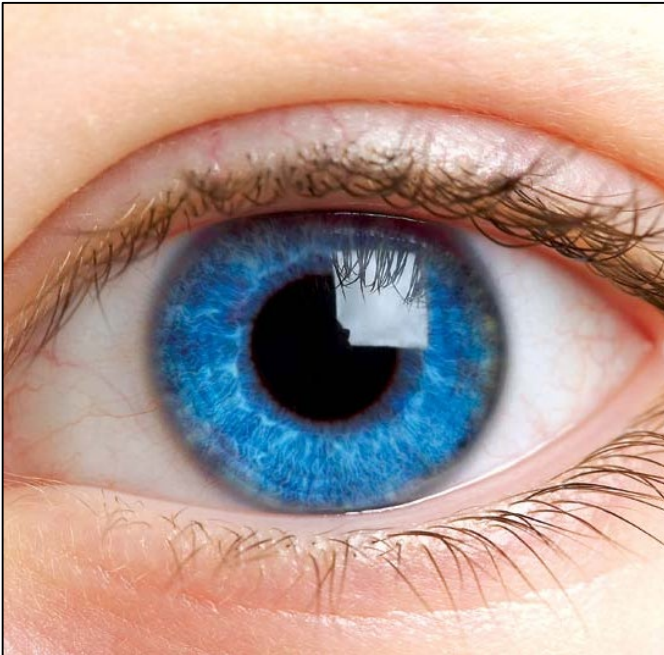
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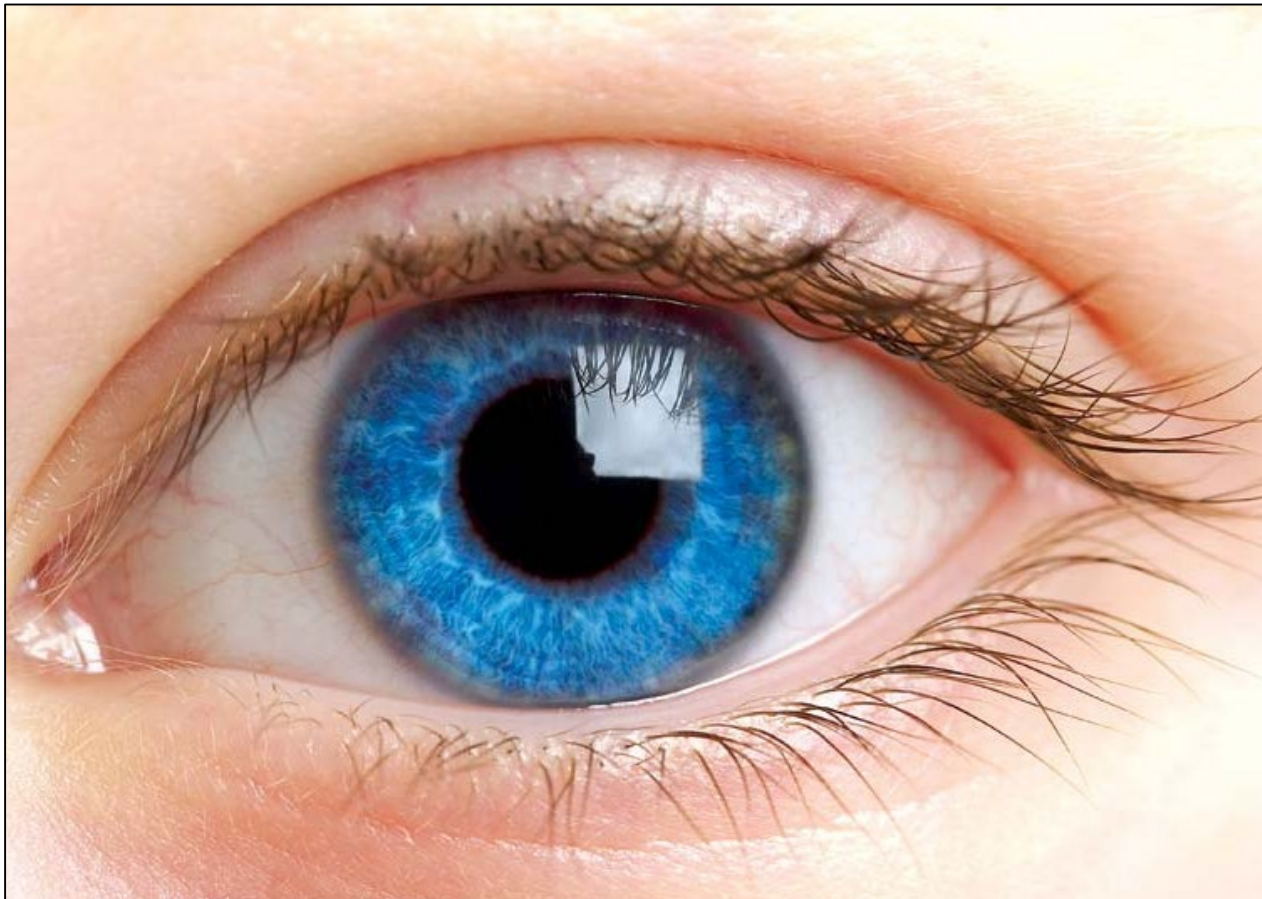
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Typical “narrow” tasks include vision, language processing, and planning.





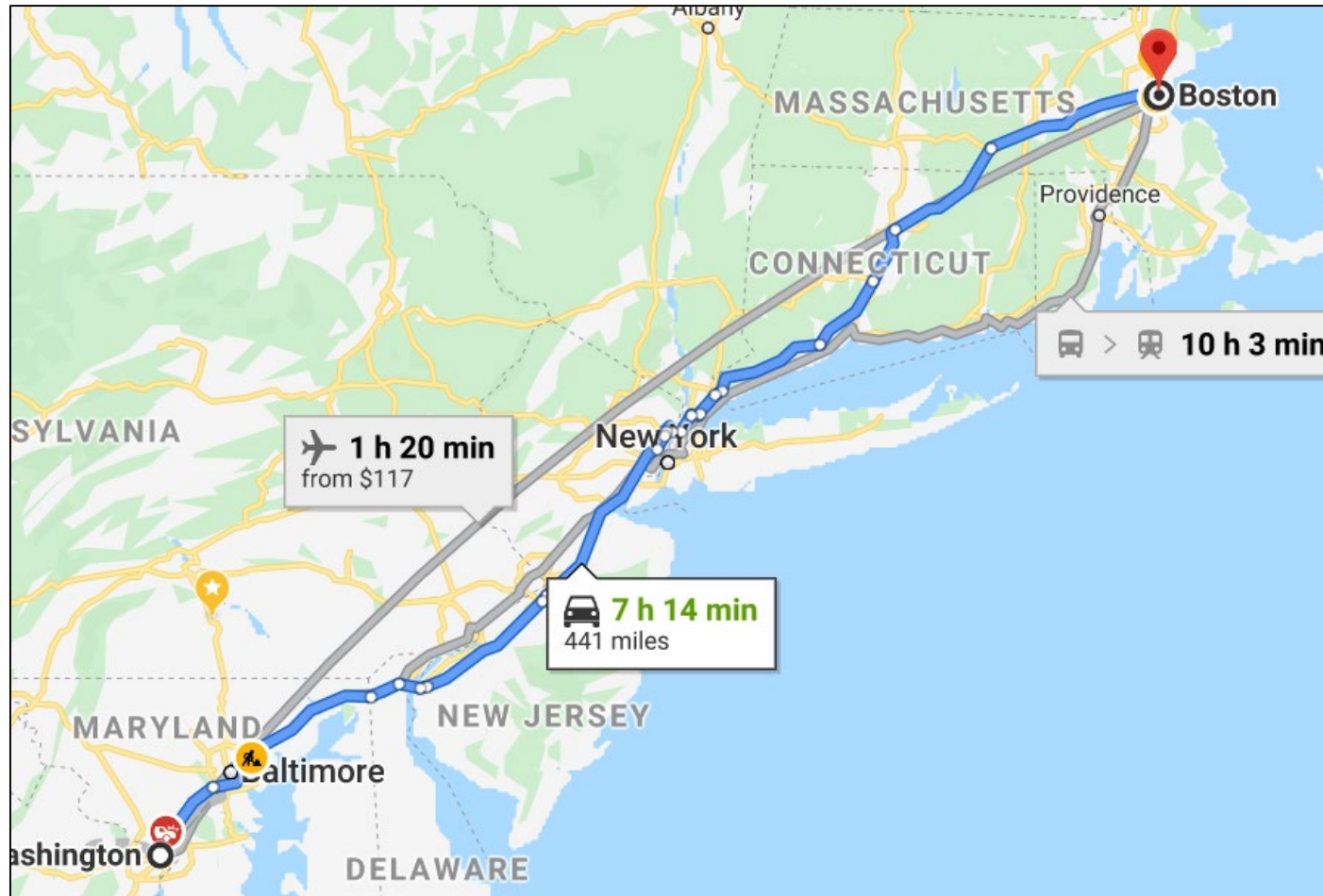
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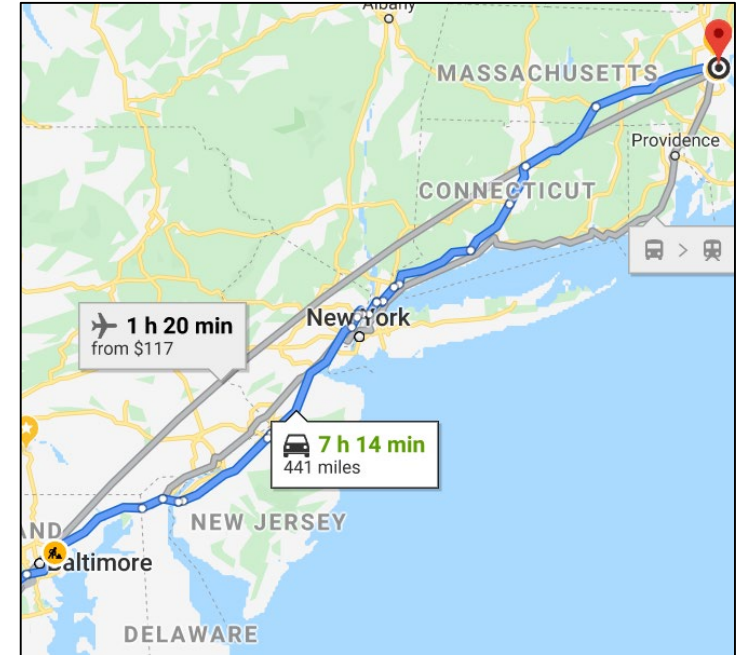
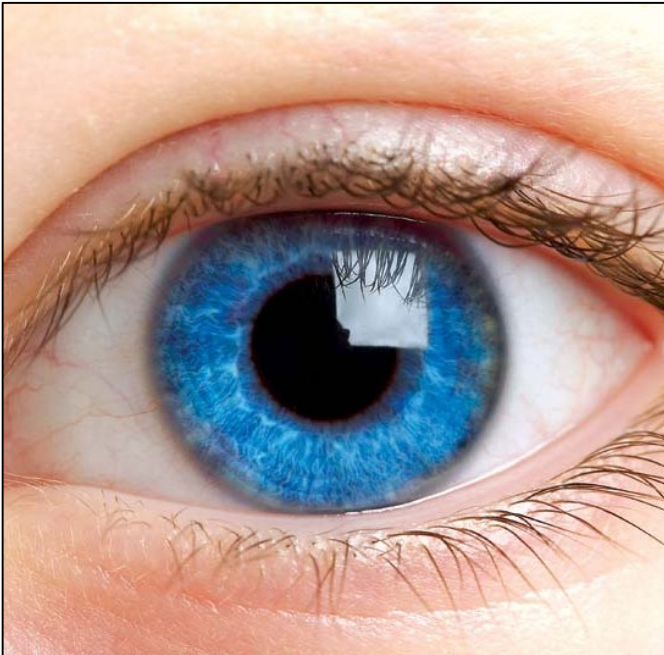


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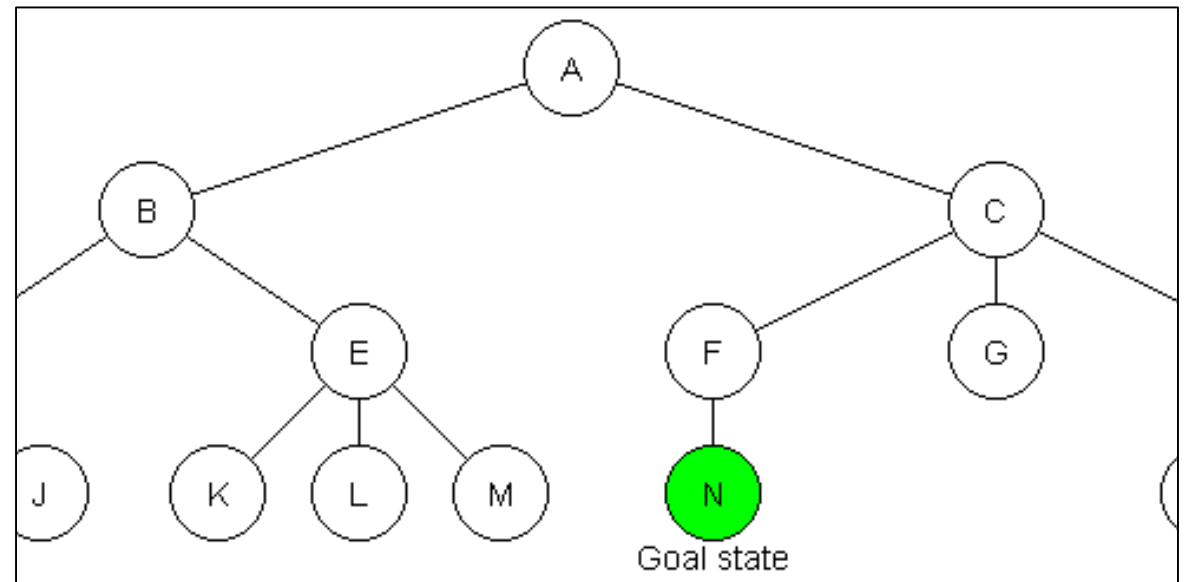
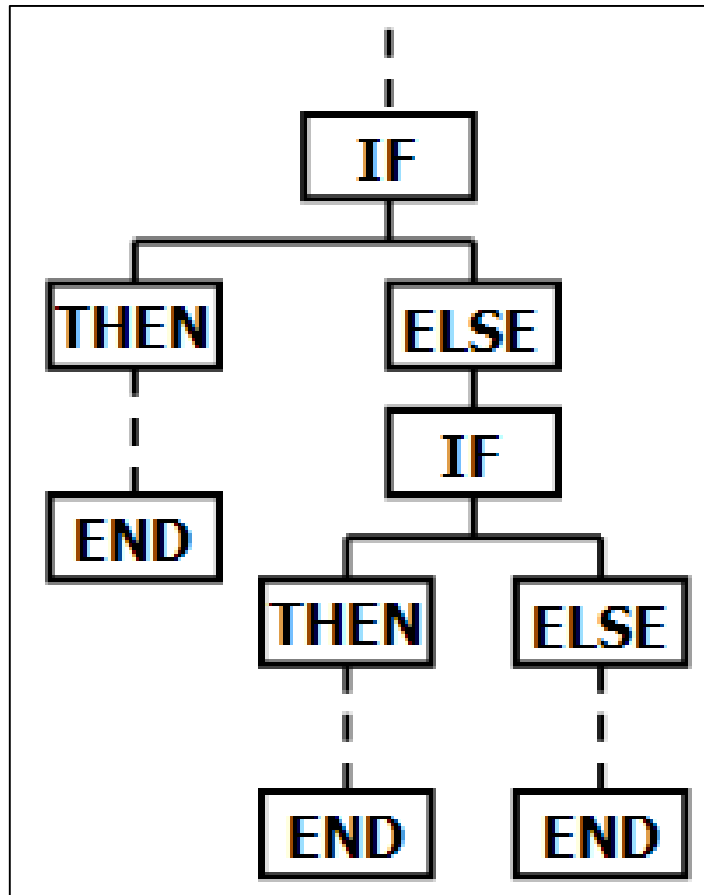




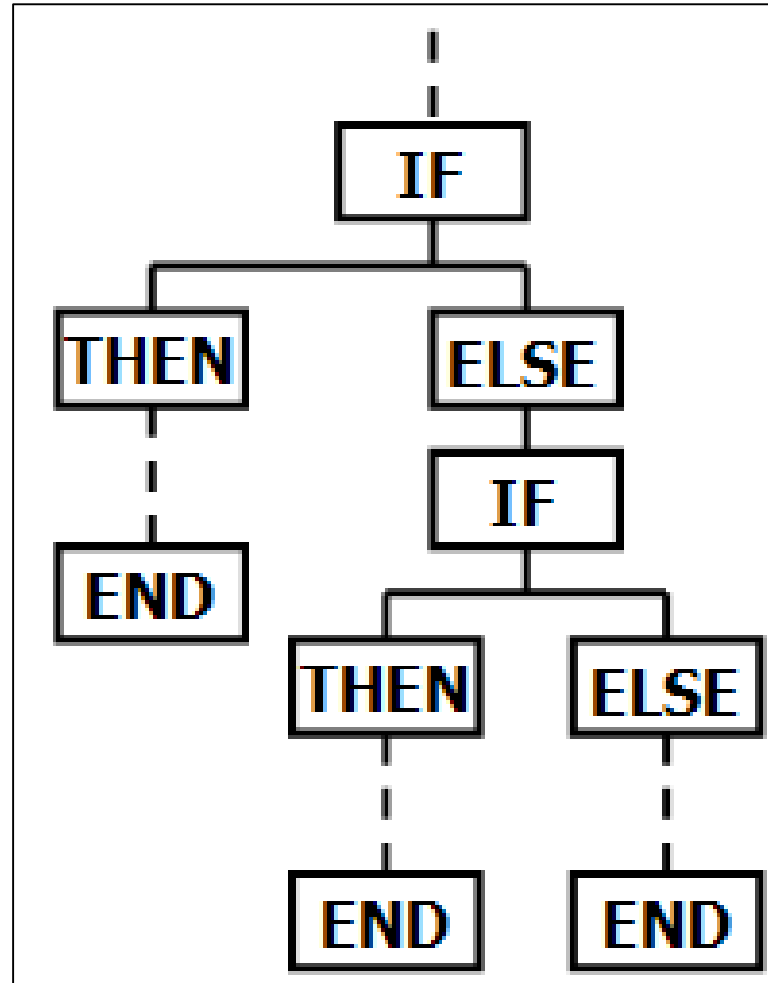
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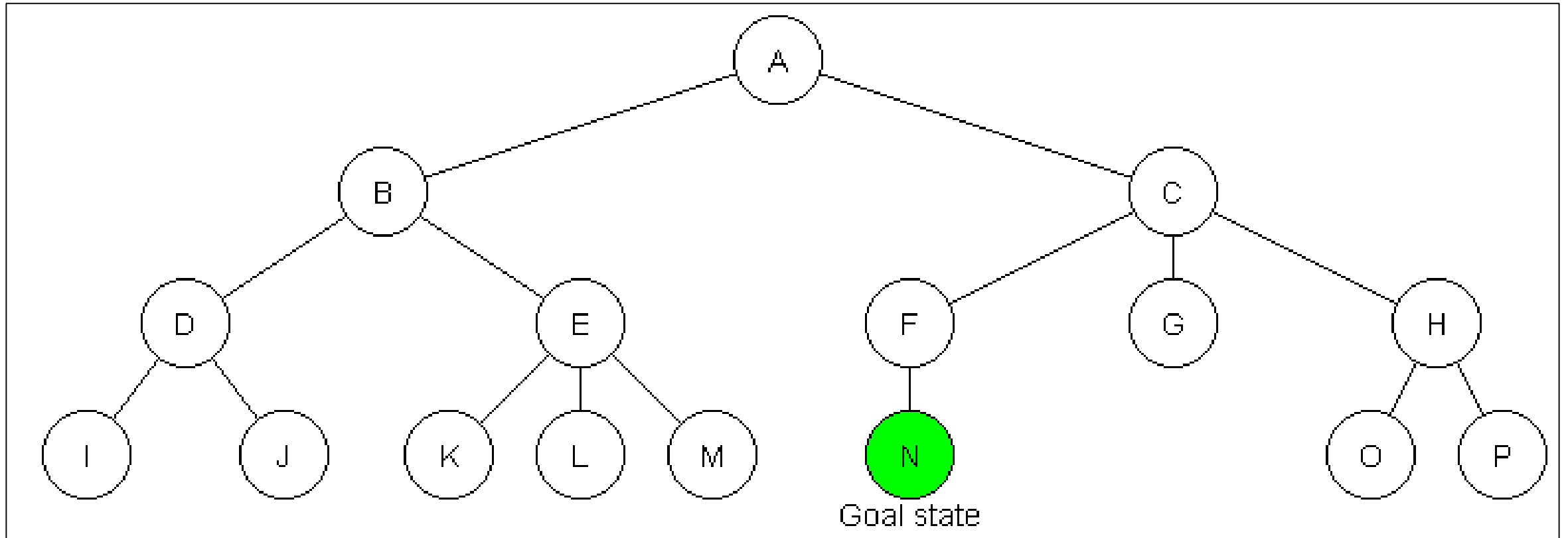
There are many ways to build AI,  
including expert systems and tree search.



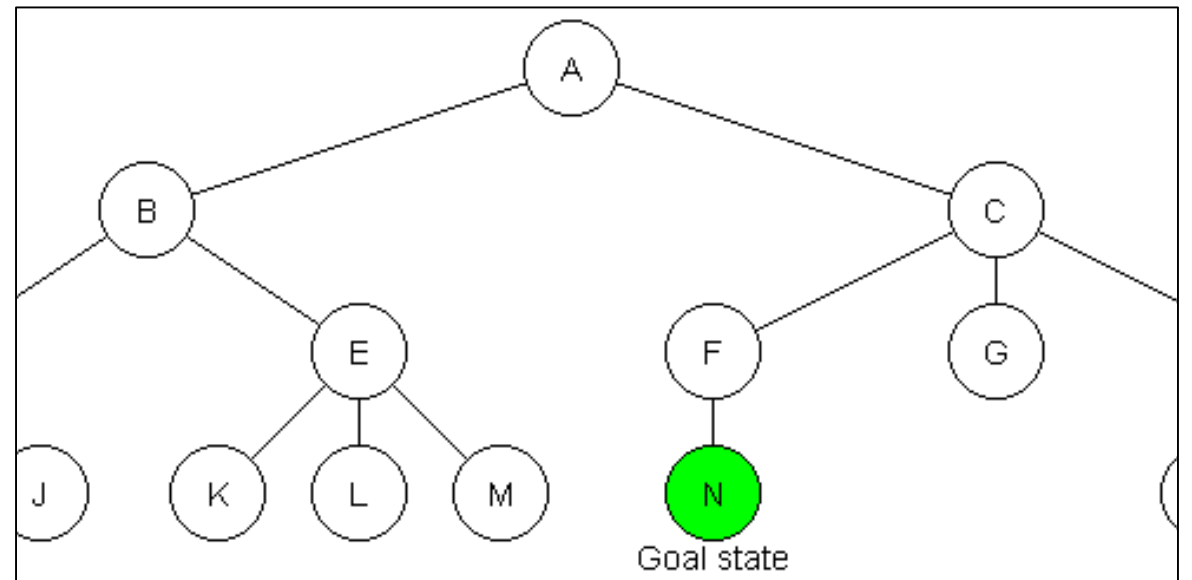
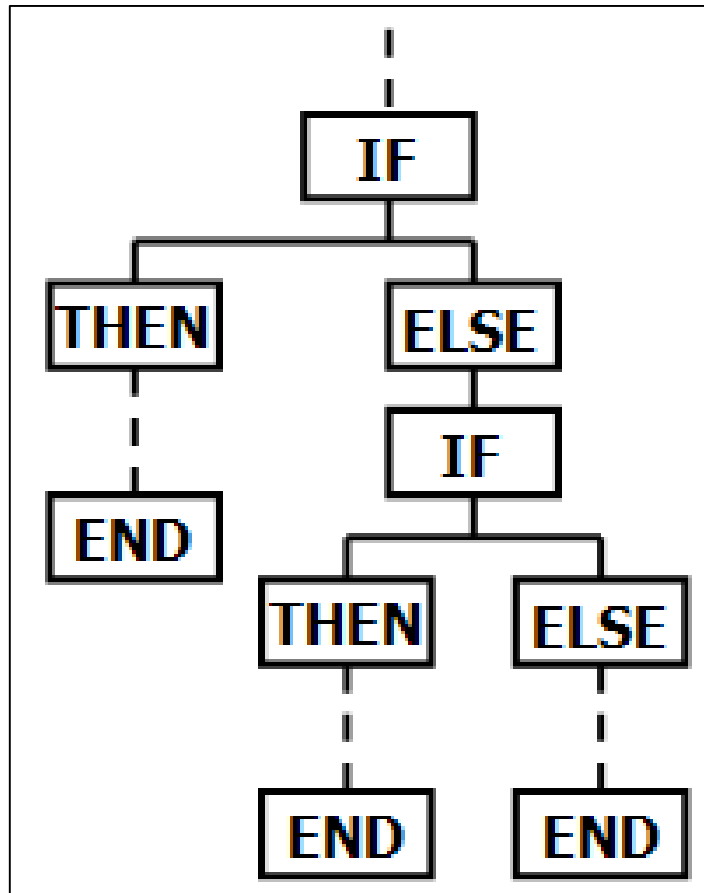
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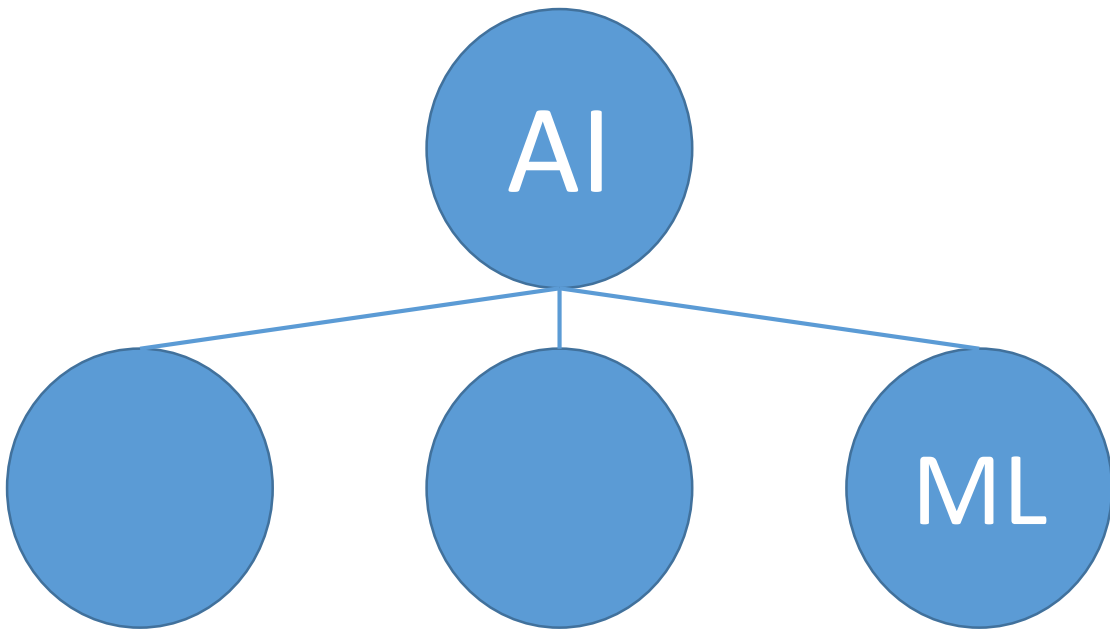


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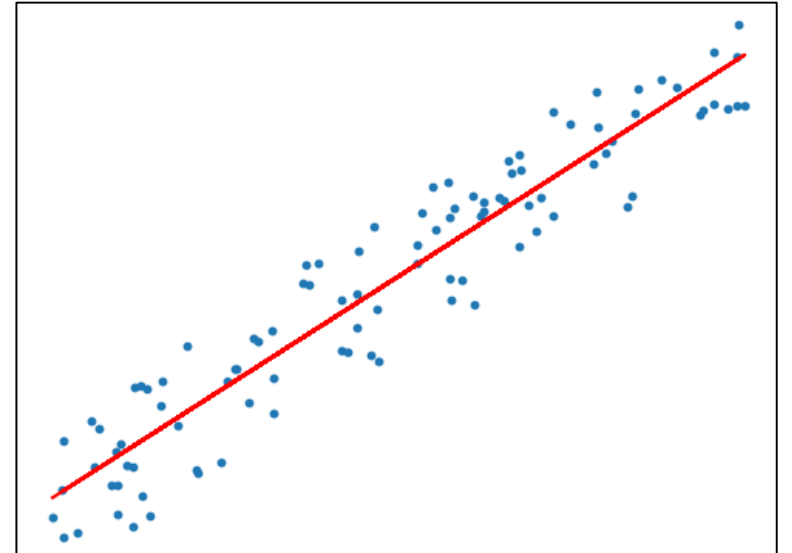
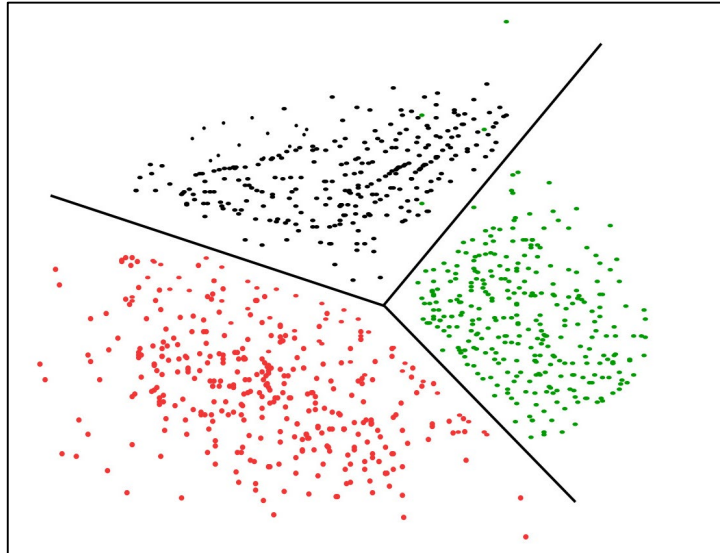




# Machine learning can perform many tasks, i.e. classification, clustering, and regression.



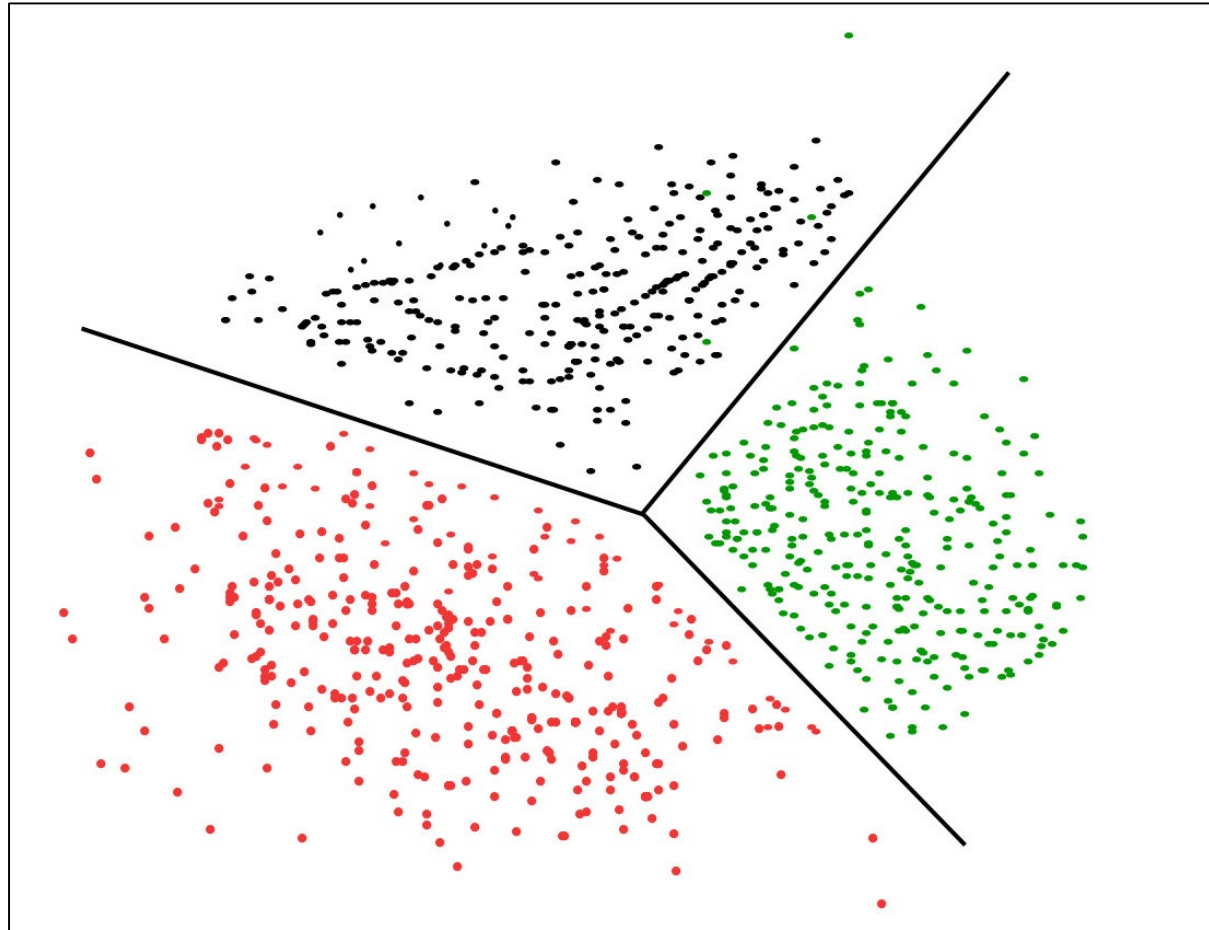
CAT



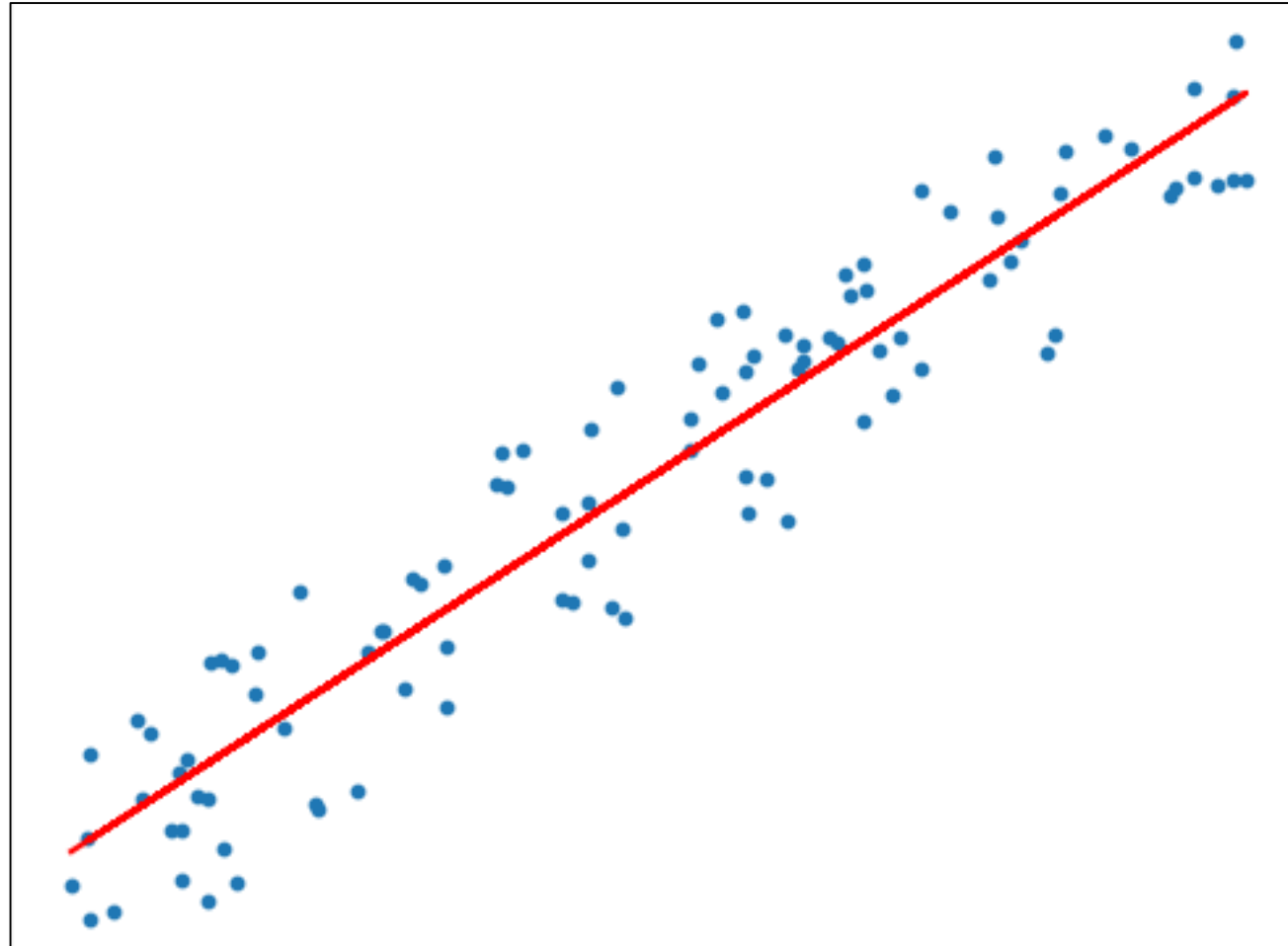
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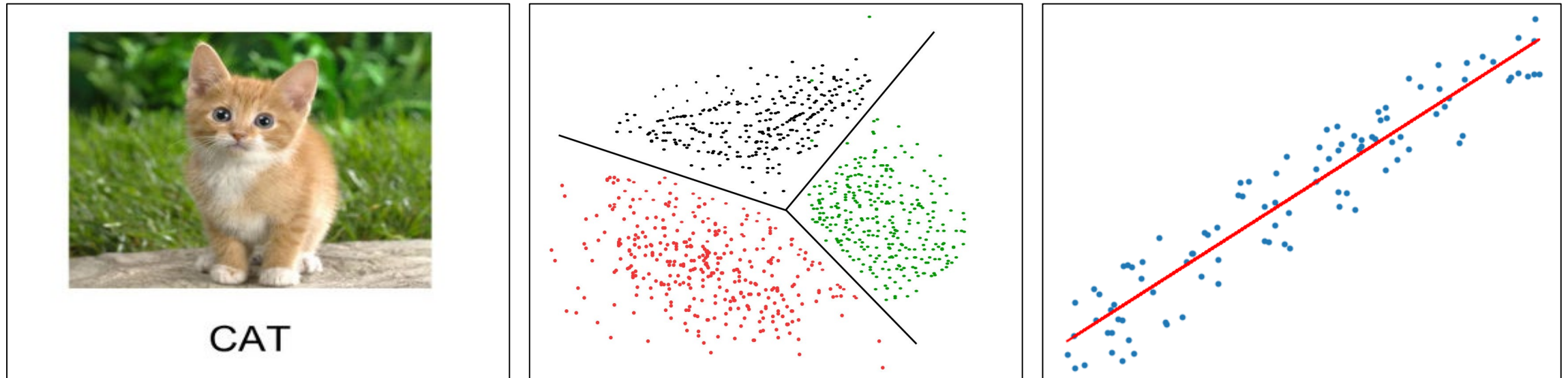
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# Machine learning can perform many tasks, i.e. classification, clustering, and regression.



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# There are three types of learning: supervised, unsupervised, and reinforcement learning.



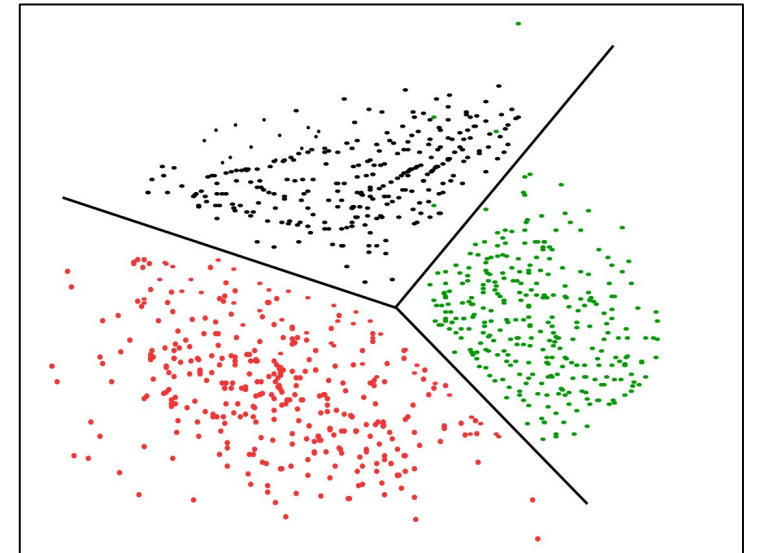


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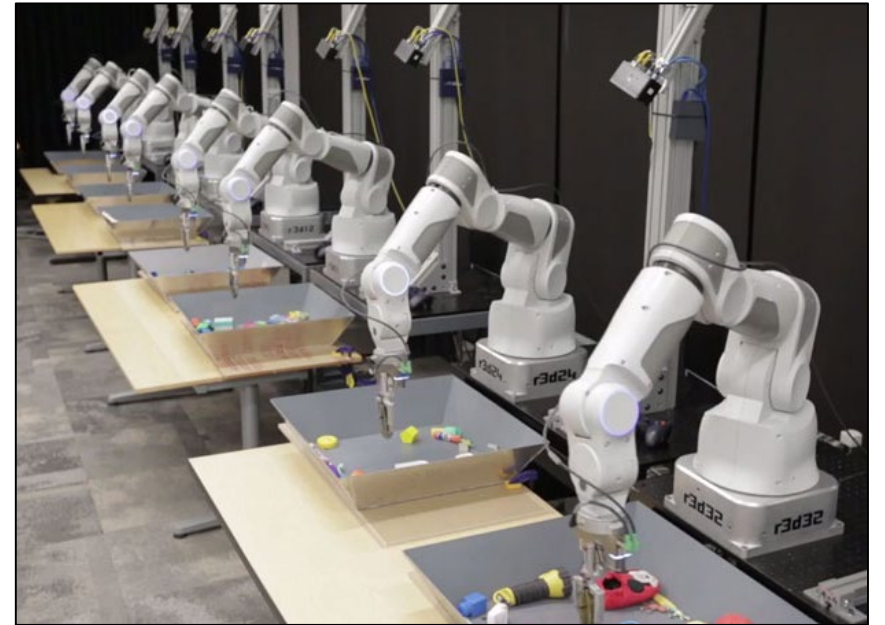


CAT

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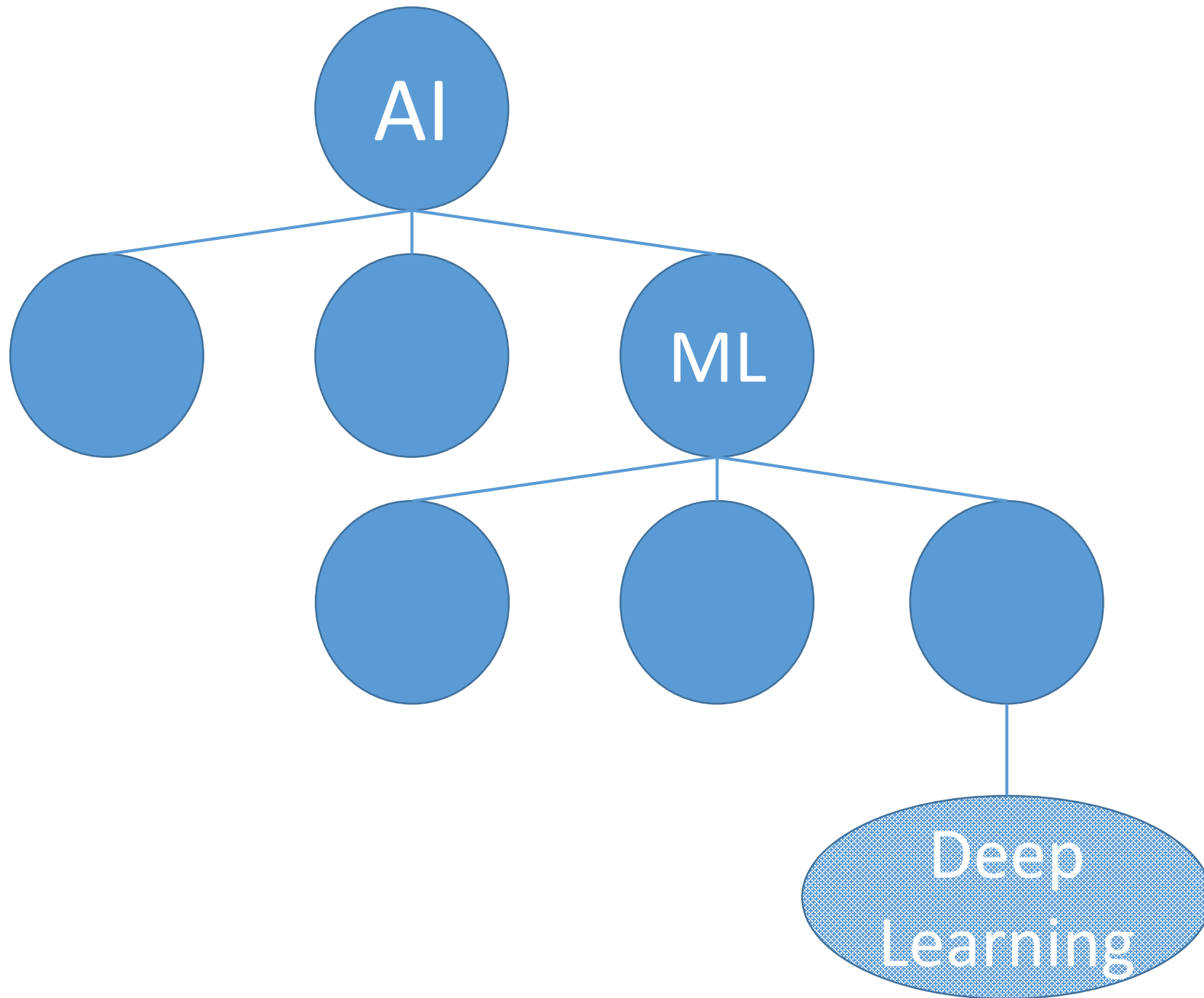
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With the right data and the right model,  
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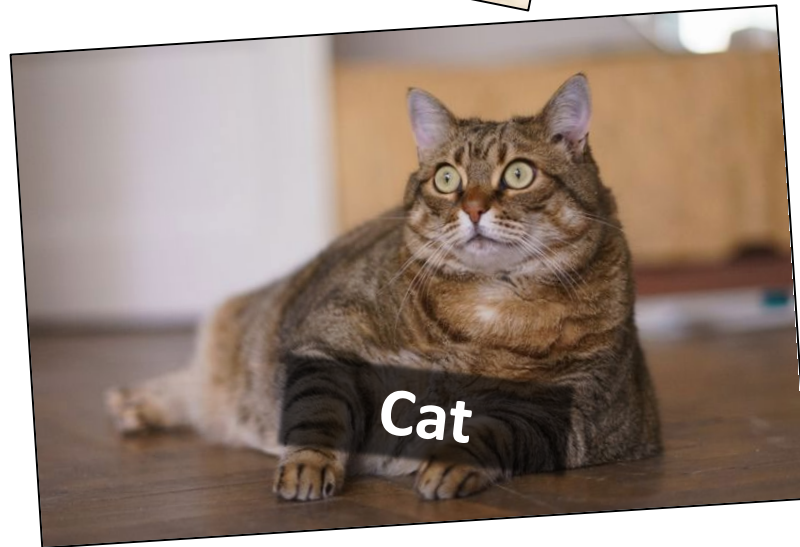
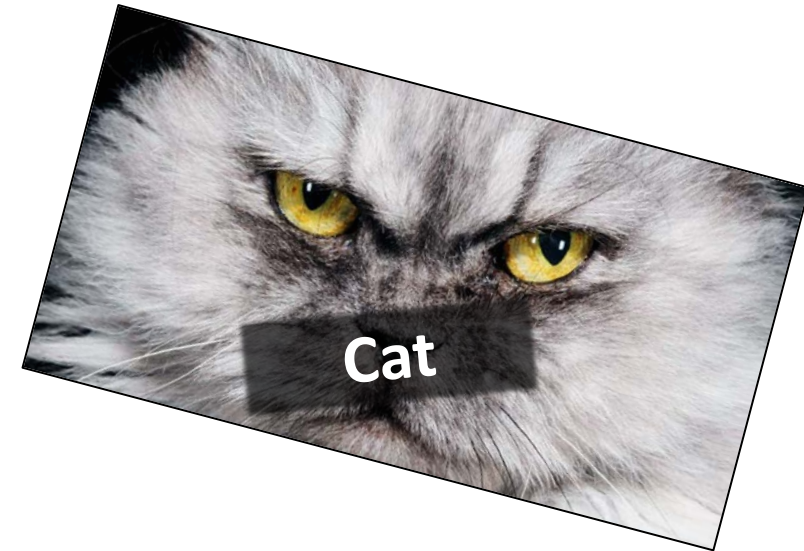
# 1. Define a problem.



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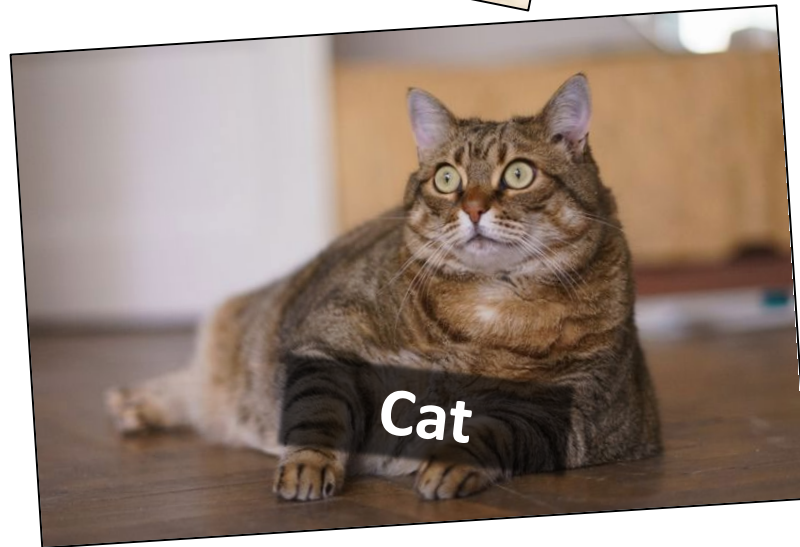
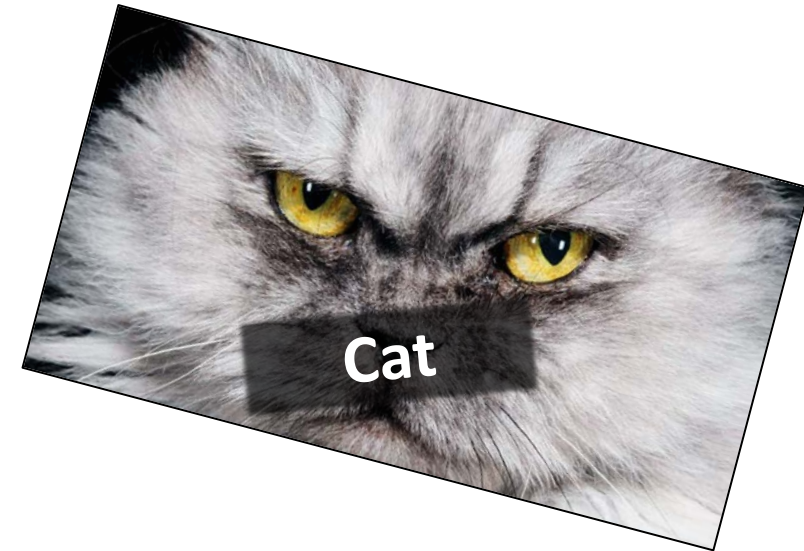


## 2. Find data.



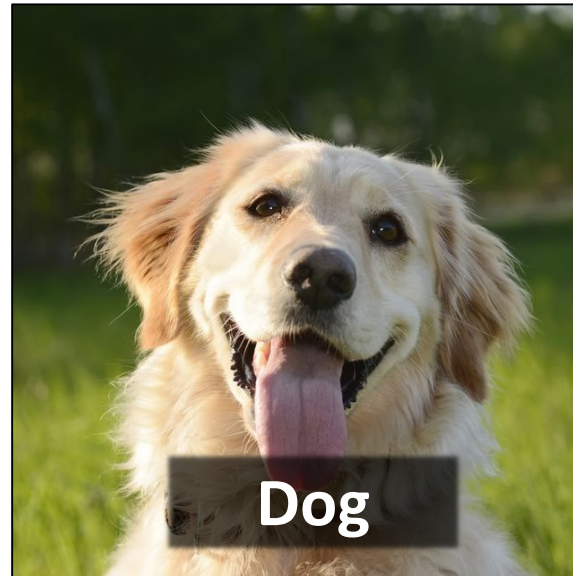


### 3. Clean data.





### 3. Clean data.



## 4. Choose a model.

Dogs

Always

Sometimes

Cats

Always

Sometimes

# 5. Train the model.

## 5. Train the model.

Cat





## 5. Train the model.

Cat





## 5. Train the model.

Dog



## 5. Train the model.

Dog



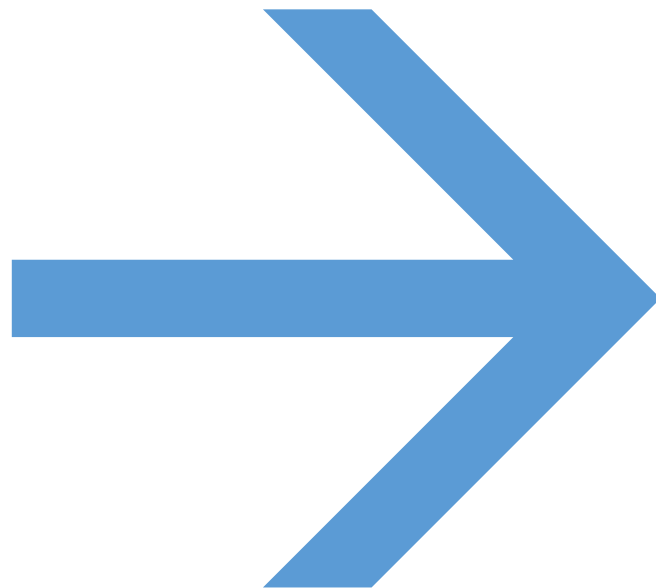
## 6. Test the model.

Cat



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# 7. Deploy the model.





1. Define a problem.



3. Clean data.



6. Test the model.

Cat



4. Choose a model.

Dogs

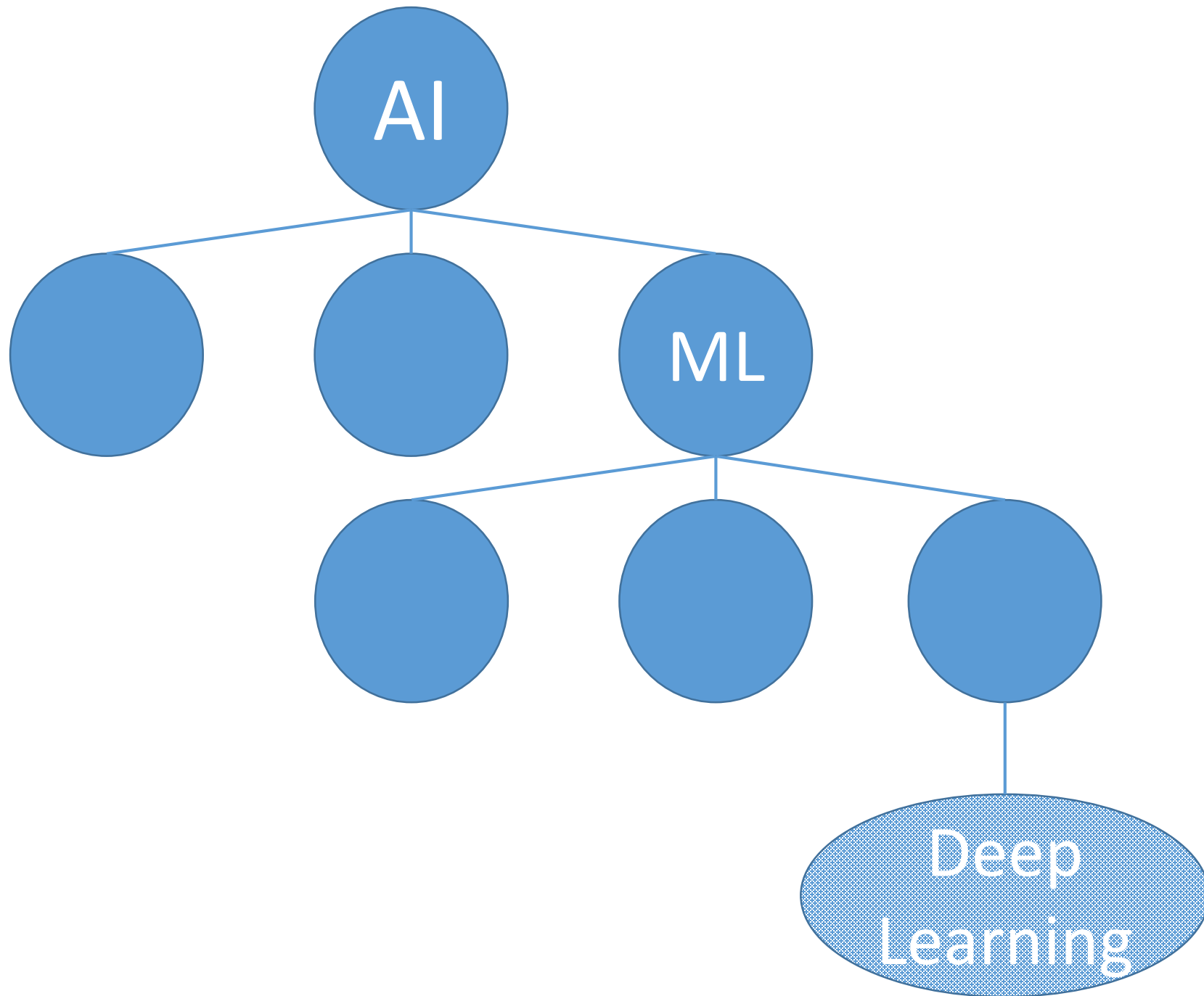
Always

Sometimes

Sometimes

Cat





# 1. Goal?



1. Goal?

2. Training data?

1. Goal?
2. Training data?
3. Model?

1. Goal?
2. Training data?
3. Model?
4. Accuracy?

1. Goal?
2. Training data?
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4. Accuracy?

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1. Goal?
2. Training data?
3. Model?
4. Accuracy?

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