

Teach Amazon Sumerian to play Rock, Paper, Scissors

Who are we

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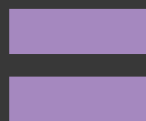
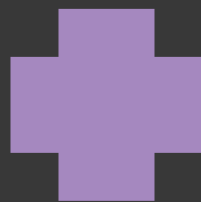
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What we did?



Why

- Fun
- Learn some new technologies
- Explore future capabilities for customer engagements
- AWS Summit

Demo

Amazon SageMaker



What is Machine Learning

- Teaching machines to perform repetitive tasks
- Black Magic!!
- Lots of Maths
- If you are still at Uni then DO THE MATH people!!

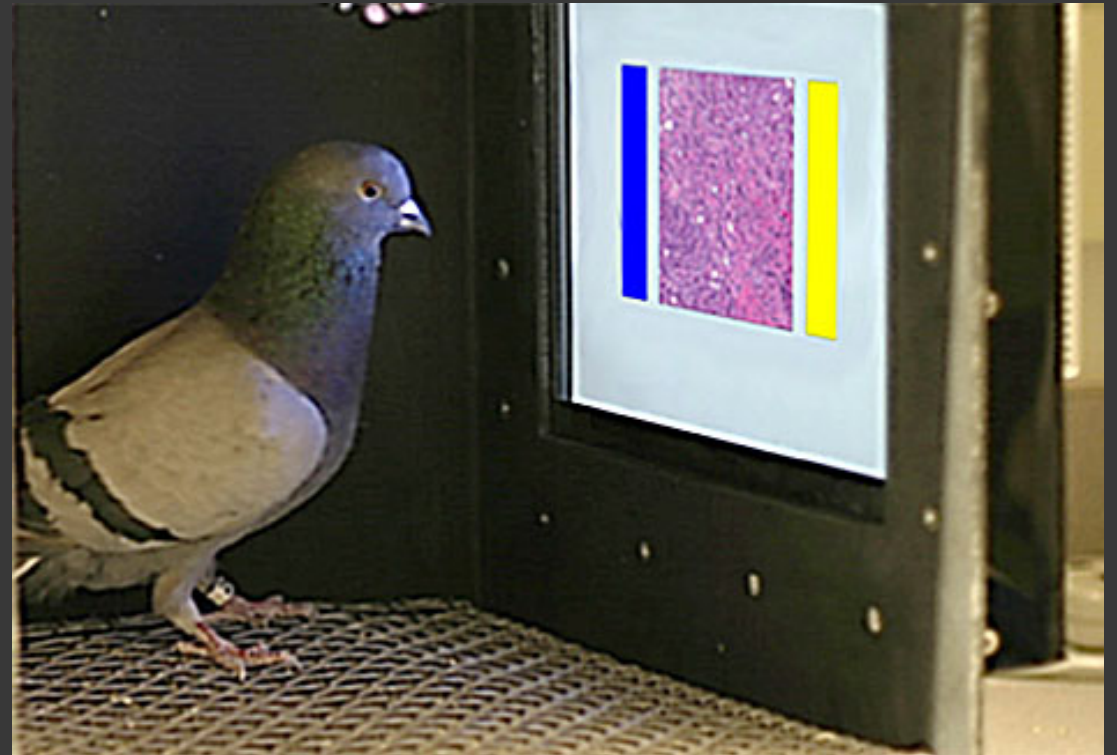


Image Recognition

- Models
 - ResNet
 - MobileNet (Google)
- ImageNet
 - Training
- Transfer Learning
 - Import the weights
 - Someone else's hard work
 - Remove some layers

The Notebook

SageMaker

- Ground Truth – All about labelling
- Notebooks – Jupyter Notebooks
- Training – Builtin Algorithms, Training Jobs, Hyperparameter tuning
- Inference – Hosting models, Batch jobs

SageMaker Algorithms

- Natural Language Processing – word2vec
- Image Classification – ResNet
- IP Insights – ipv4 address patterns
- Lots of other very Mathy things with other use cases – RTFM
- Bring your own – Docker image



Amazon Sumerian



Outro

Takeaways

It's not that hard!

AWS abstract a lot of the pain away.

They are making it easy for the masses.

It's Cheap!

Get your hands dirty!

You can do some things within the free tier.

DISCLAIMER!

Turn it off when you are done! Don't be like John.

Profit?

Do it the easy way unless you have constraints.

How can you apply machine Learning to your job or at home.

Let's discuss in the break!

Questions?

<https://github.com/bulletproofnetworks/sumerian-summit-oss>

AC3