ENVISAGE.AI

Knosis

7

KNIGHT

The eyes of AI.

AI's window into our world are the data streams we give it access to. It is up to us to choose meaningful, relevant sources.

PC | MOBILE CAMERA | IOT | CAMERAS

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DATA STREAMS

(PIPELINES)

LATENCY
REPLAYABILITY
CHUNKING / BLOCKS
SHARDING /TOPICS /LABELS
ENCRYPTION
AUTHENTICITY

1

HARVESTER

6

BOTTLER

Seal of Quality.

In order to allow high-value, critical business processes to depend on the functioning of machine learning algorithms their behaviour needs to be further tested on validation datasets that are guaranteed to be impartial, unbiased and unused in the training process.

Additionally, robustness, resilience to noise, encoding artefacts and other real-world imperfections is crucial to offering 360-visibility on the quality of your machine learning

Researchers unite.

Model designs are proposed, publicly or privately, by researchers.

8

SCHOLAR

PROPOSE

DEFINE NEW MODELS

QA for ML

Seal of Quality

In order to allow high-value, critical business processes to depend on the functioning of machine learning algorithms their behaviour needs to be further tested on validation datasets that are guaranteed to be impartial, unbiased and unused in the training process.

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CERTIFY (ACCURACY, PERFORMANCE ROBUSTNESS)

5

NOTARY

DEEPVISS

STANDARDS, QUALITY

EVALUATE & PROMOTE

DEEPVISS

Trust and Integrity.

One of the core pillars on any intelligent system is to have an uncompromising definition of the truths that it is pursuant of, more than of the truths that it already posses.

VIRTUOUS CIRCLE OF INTELLIGENCE

Feedback
Edge cases
Adversarial exemples

Adopt
Implement
Test

Breathing the fire of intuition into the metal of the machine

Machine learning is about allowing algorithms the freedom to pursue better solutions by tuning their own algorithms in pursuit of a defined purpose. Blacksmith allow algorithms the fire breeding ground for developing intuition.

2

SPINNER

Keeping the human touch.

Machines won't do what we expect if we can't answer their questions when they don't know or correct them when they're wrong.

DEV for ML

Assembling the machine

Real world functionality is often reliant upon several machine learning algorithms sharing inputs, embeddings, higher-order representations and states.

Also, at this stage, the weights of several versions of the same machine learning models, trained on different data blocks, can be merged, while only having visibility to a (disjoint) set of validation data.

4

CLOCK MAKER

EVALUATES ON BLOCKS, SHARDLINE

MIXES WEIGHTS OF SEMI-TRAINED MODELS

PARENT
KPI
SHARDLINE

POOL OF SEMI-TRAINED MODELS

3

BLACKSMITH

TRAINING MODEL CANDIDATES

GPU / TPU

MAINTAIN MODEL CANDIDATE TREE

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TAGGED BLOCKS, SHARDS

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