GOVERNANCE FOR AI AND HOW IT IMPACTS GEOSPATIAL

Wouter Brokx, CEO
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Artificial Intelligence (AI) is a system’s ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation.

Kaplan & Haenlein, 2018

Artificial Intelligence (AI)

- Machine Learning (ML)
- Deep Learning (DL)
- Convolutional Neural Networks (CNN)
- Transfer Networks (TN)
During 2015-2018

50.000.000

accounts stolen and abused

Source: Vox, Guardian, Forbes
Governance is the way rules, norms and actions are structured, sustained, regulated and held accountable.

How does AI relate to GEOSPATIAL?
A government case study

#1 Data Governance
#2 Algorithm Governance
Machine learning algorithms build a mathematical model of sample data, known as "training data", in order to make predictions or decisions without being explicitly programmed to perform the task.

Arthur Samuel, 1959

Artificial Intelligence (AI)

Machine Learning (ML)
Deep Learning (DL)
Convolutional Neural Networks (CNN)
Transfer Networks (TN)
OBSTRUCTION OF WATERWAYS

A. CHANGE DETECTION MODEL

97% success

B. DETECTION WITH MACHINE LEARNING

47% success

97% success
DATA GOVERNANCE

Applied to Machine Learning Model
COMMON GROUND

A modern architecture
GOVERNANCE OF ALGORITHMS

An option based on Common Ground

Common Ground Model

- UX
- PROCESS
- INTEGRATION
- SERVICES
- DATA

A hybrid model

- UX
- PROCESS
- INTEGRATION
- SERVICES
- DATA

Applications, algorithms models & code open.

Platform, engines & API’s by Software Partner

Data @ Source = control
SHARING

Co-creation platform

VALLEY

Applications, algorithms models & code open. Free for Gov to share

Platform, engines & API’s by Software Partner

Data @ Source = control
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