

**Semana de Innovación
Tecnológica en Archivos**

SITA 2018



**Experiencia
y conocimiento**

Machine Learning aplicada a Gestión Documental

Jean Phillip Bernier

**SITA
2018**



La Fórmula



Algunas Definiciones

El mundo de la Inteligencia Artificial

1



INTELIGENCIA ARTIFICIAL

Código, algoritmo o Técnica que permite simular, mimificar o demostrar el comportamiento humano. Actualmente estamos en la era de la IA débil.

2



MACHINE LEARNING

Aprendizaje desde los datos enfocado en representar las técnicas y métodos que actualmente se realizan de forma común por los humanos.

3



DEEEP LEARNING

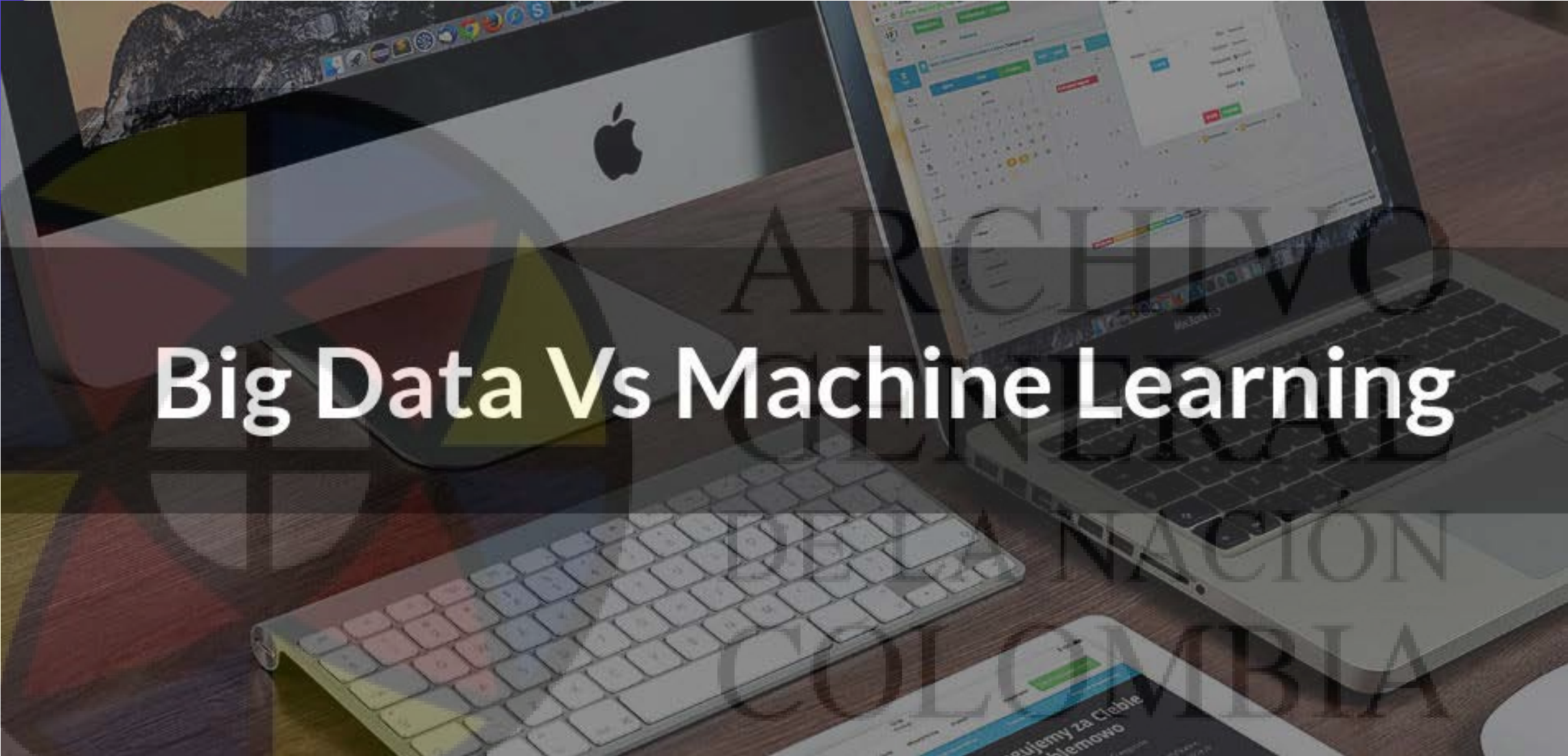
Aprendizaje profundo y mayormente autónomo usando las redes neuronales artificiales – ANN.

4



BOTS

Automatización de procesos y de alguna forma sentidos de la IA para recolección de datos y fortalecer los procesos cognitivos.



Big Data Vs Machine Learning

<https://www.educba.com/big-data-vs-machine-learning/>

#1. Data Use

Big Data

Big data can be used for a variety of purposes, including financial research, collecting sales data etc.

Machine Learning

Machine learning is the technology behind self-driving cars and advance recommendation engines.

<https://www.educba.com/big-data-vs-machine-learning/>

#2. Foundations for Learning

Big Data



Big data analytics pulls from existing information to look for emerging patterns that can help shape our decision-making processes.

Machine Learning



On the other hand, Machine learning can learn from the existing data and provide the foundation required for a machine to teach itself.

<https://www.educba.com/big-data-vs-machine-learning/>

#3. Pattern Recognition

Big Data



Big data analytics can reveal some patterns through classifications and sequence analysis.

Machine Learning

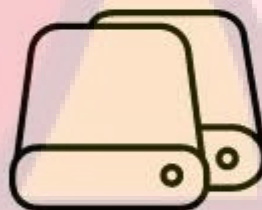


However, machine learning takes this concept a one step ahead by using the same algorithms that big data analytics uses to automatically learn from the collected data.

<https://www.educba.com/big-data-vs-machine-learning/>

#4. Data Volume

Big Data



Big data as the name suggest tends to be interested in large-scale datasets where the problem is dealing with the large volume of data.

Machine Learning



ML tends to be more interested in small datasets where over-fitting is the problem.

<https://www.educba.com/big-data-vs-machine-learning/>

#5. Purpose

Big Data

Purpose of big data is to store large volume of data and find out pattern in data .

Machine Learning

Purpose of machine learning is to learn from trained data and predicts or estimates future results.

www.educba.com

<https://www.educba.com/big-data-vs-machine-learning/>

Algoritmos de ML

Machine learning methods

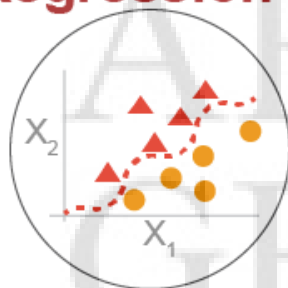
Decision trees



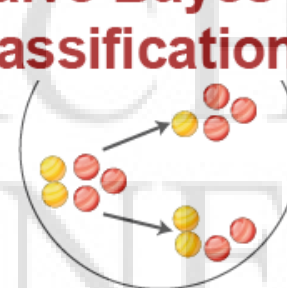
Support vector machines



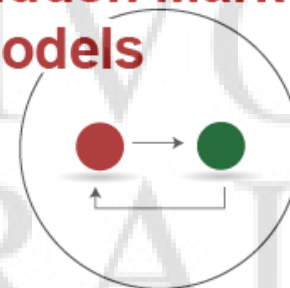
Regression



Naive Bayes classification



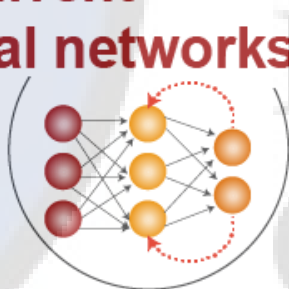
Hidden Markov models



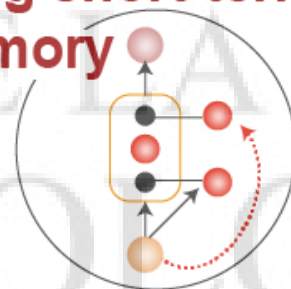
Random forest



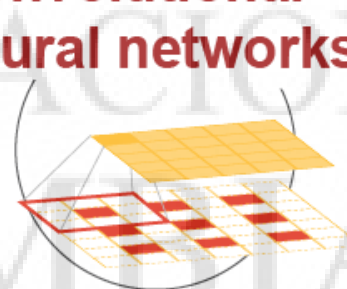
Recurrent neural networks



Long short-term memory



Convolutional neural networks

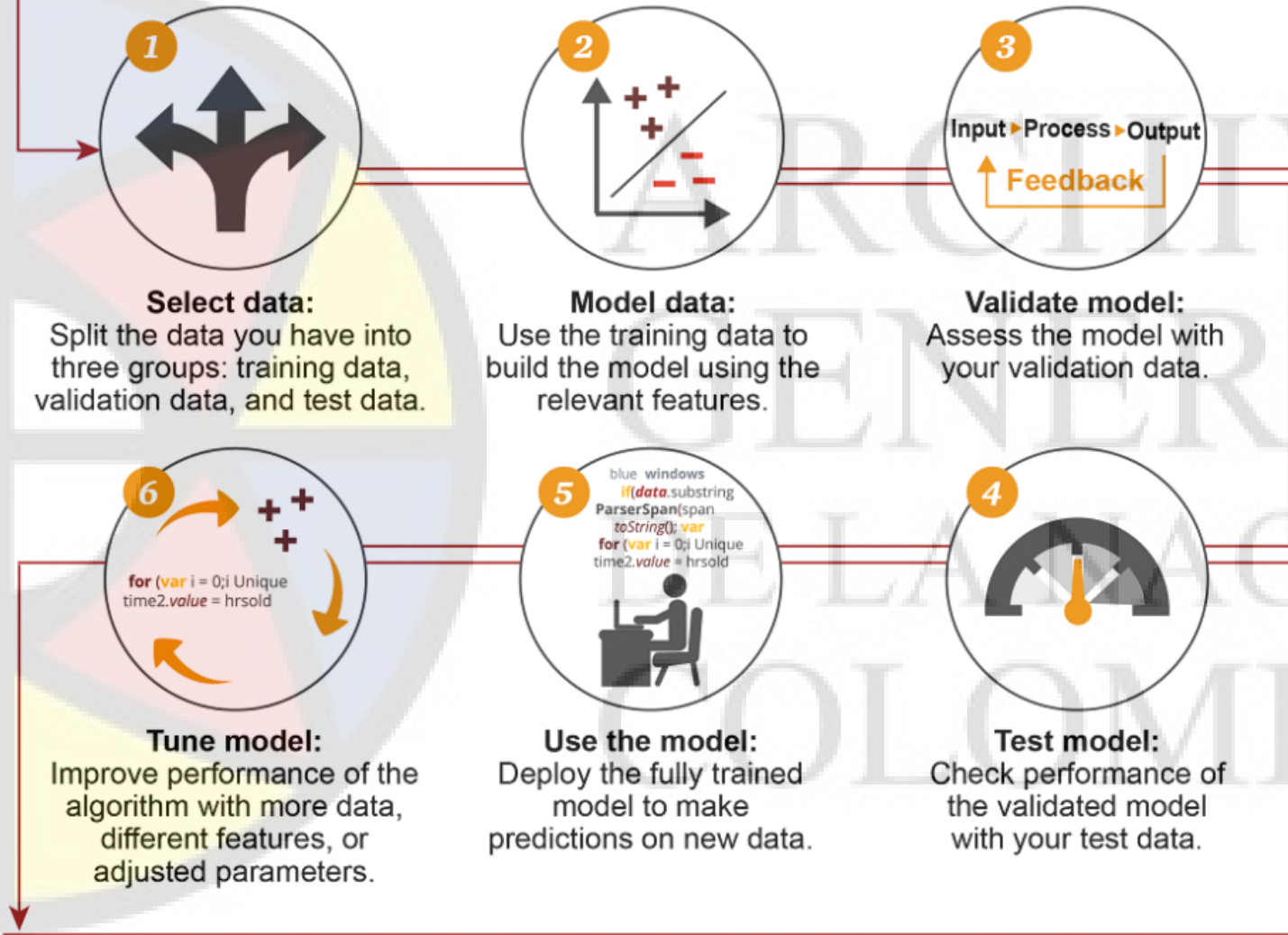


Source: pwc.com/nextintech

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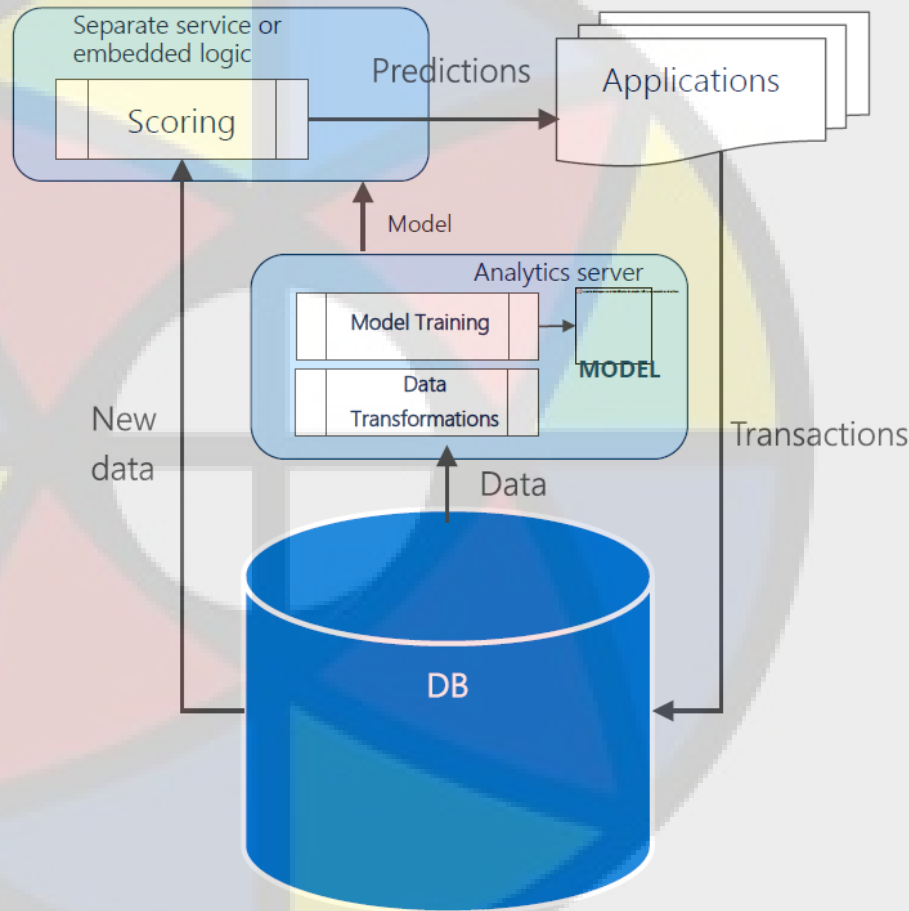
El proceso de ML

How machine learning works

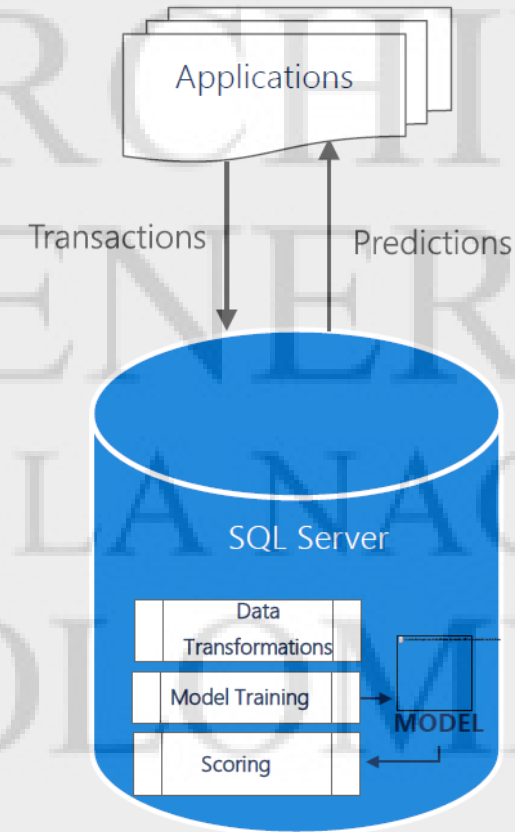


Alternativas de ML (Fuente Microsoft)

Streamline Productivity and Simplify Deployment



Machine Learning outside of DB

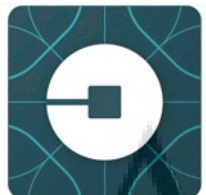


In-DB Machine Learning



Ejemplos de ML

NETFLIX

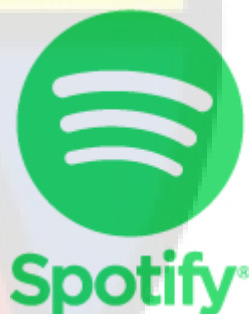

UBER



Hey Siri

 **Office 365**

lyst



PayPal



Hi, I'm Cortana.



Nuestros Casos de Éxito

AKOOUNTGO



FRIENDS N GIFTS

Referencias

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GRACIAS!!

Jean Phillip Bernier

Jean.bernier@berniergroup.com

Grupo Bernier



/GrupoBernier/



/jean-phillip-bernier/

