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IBM Developer



Eliminate bias and enhance fairness in AI models using Cortex Certifai

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Starting in 2 days, 14 hrs 56 min & 35 sec


Thu, Oct 28, 2021 3:00 PM SAST

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Say hello.

Ask a Question People 4

+ Say something nice

UPCOMING

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Use Case

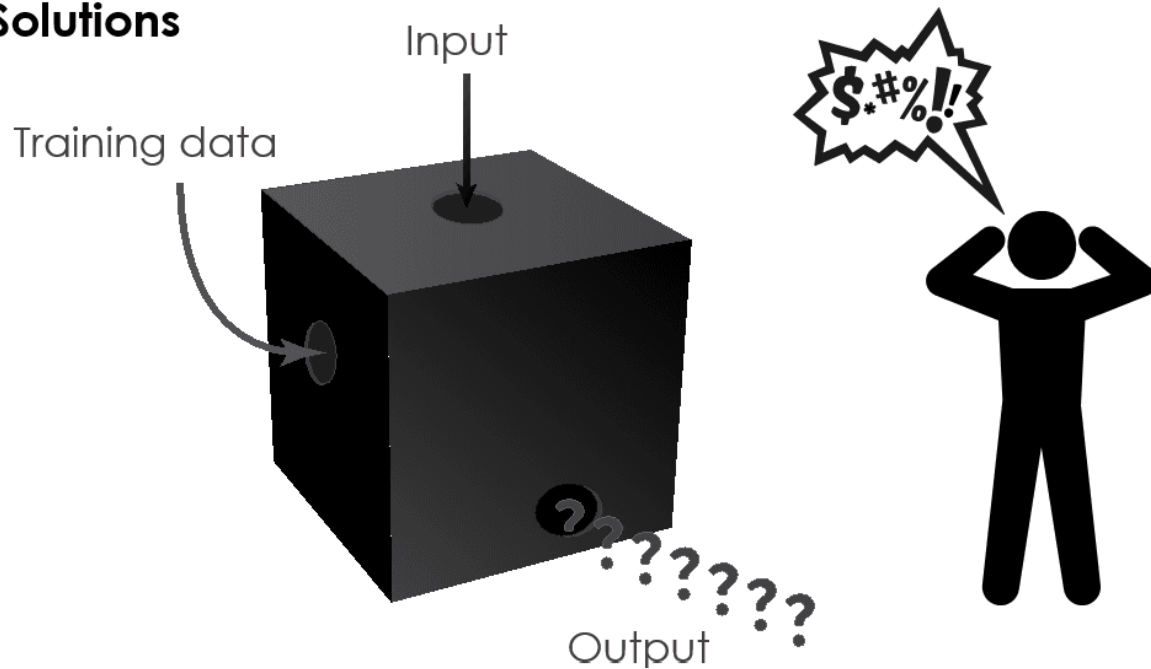
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Lack of confidence in AI

Most AI Solutions

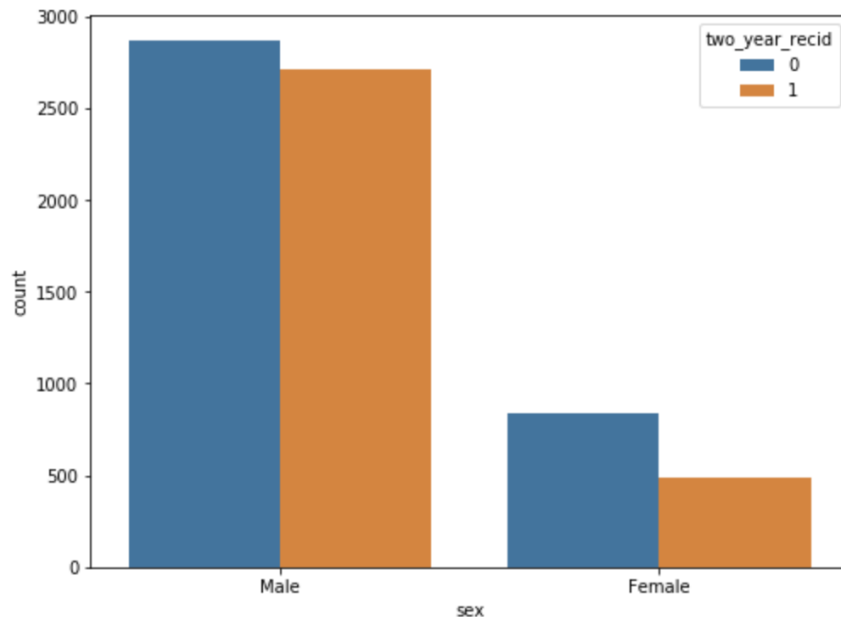


<https://netbasequid.com/blog/netbase-ai-studio-analytics/>

What is Bias?

In any data, bias occurs in any of the *protected attributes* like:

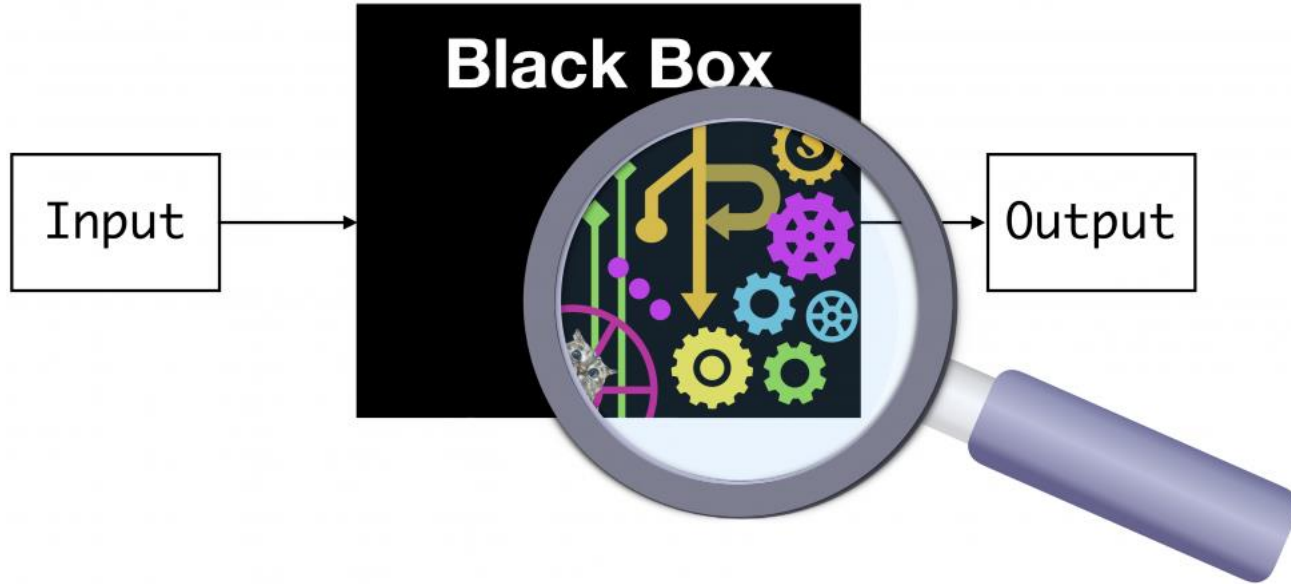
- Age
- Race
- Religion
- Gender, etc.



Gender Distribution in Data

<https://medium.com/sfu-csmpmp/model-transparency-fairness-552a747b444>

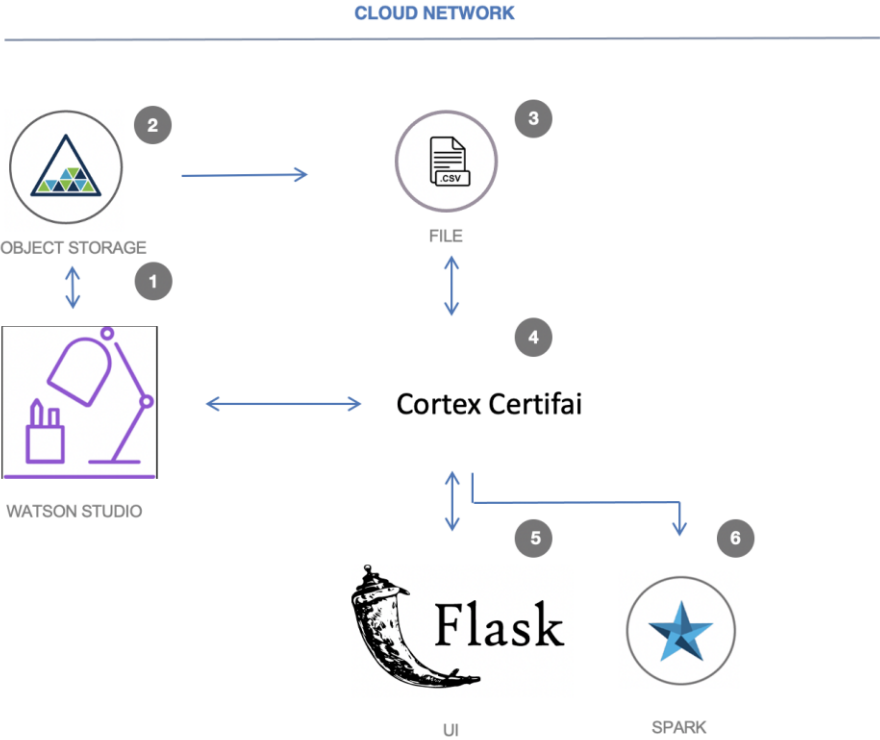
Explainability



<https://towardsdatascience.com/black-boxes-and-their-intrusion-620aa3c4c56b>

Technology Used

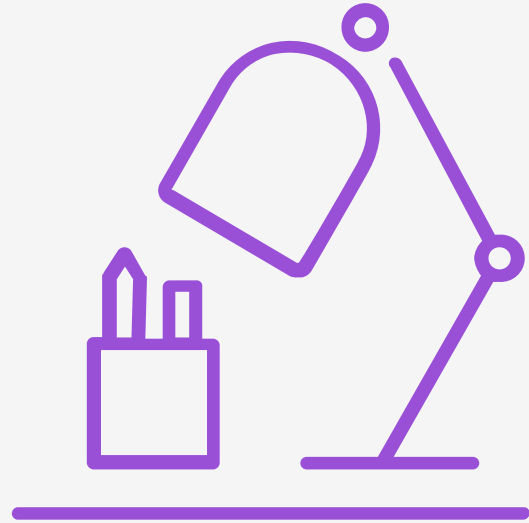
Application Architecture



Watson Studio

Watson Studio democratizes machine learning and deep learning to accelerate infusion of AI in your business to drive innovation.

Watson Studio provides a suite of tools and a collaborative environment for data scientists, developers and domain experts.



Watson Studio

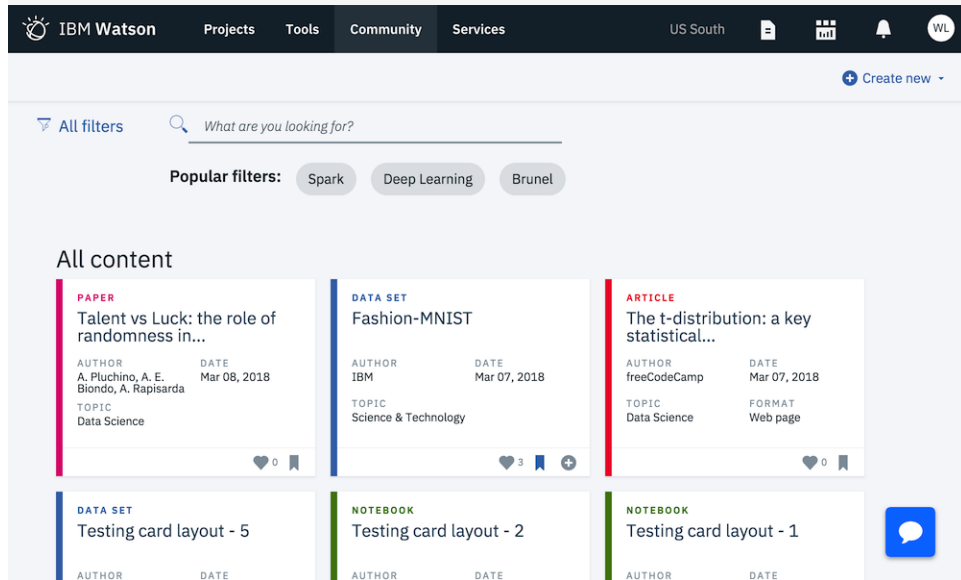
Features:

1. Use what you know, learn what you don't

Start from a tutorial, start from a sample, or start from scratch.

Tap into the power of the best of open source (RStudio, Jupyter Notebooks) and Watson services for flexible model creation.

Use Python, R, or Scala. Stop downloading and configuring analysis environments and start getting insights



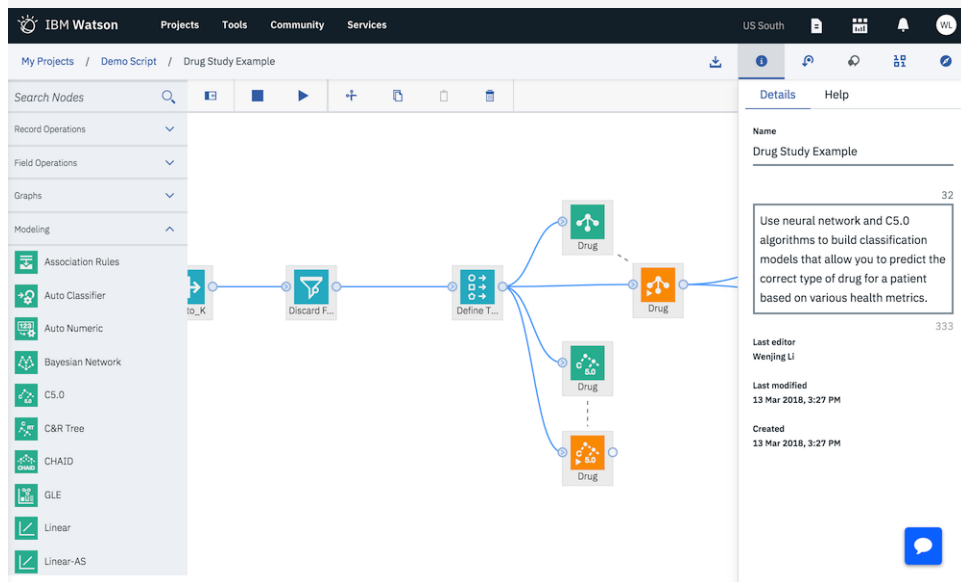
Watson Studio

Features:

2. Power on demand

Enterprise-scale features on demand. From data exploration and preparation, to enterprise-scale performance.

Manage your data, your analytical assets, and your projects in a secured cloud environment.



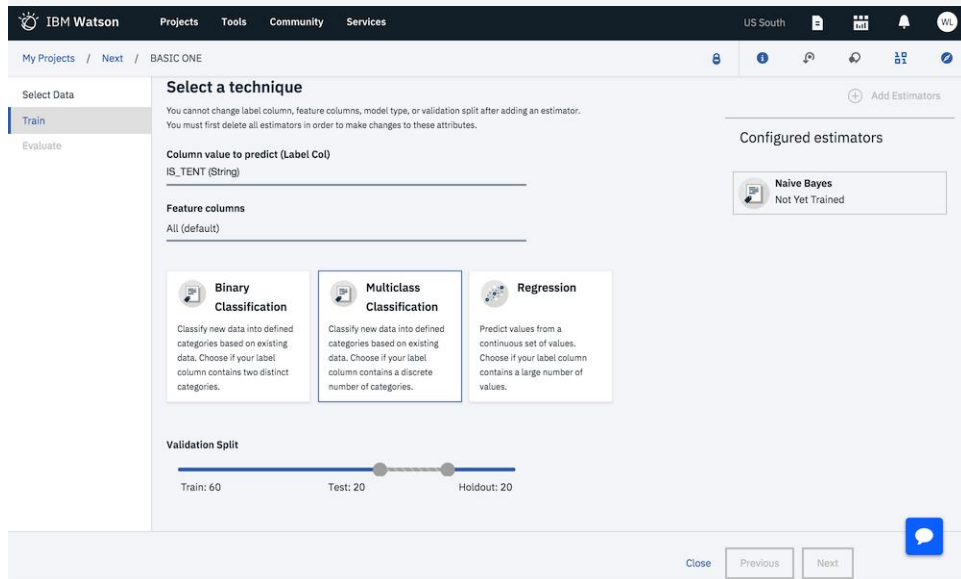
Watson Studio

Features:

3. Be a founding member

Take advantage of shared data sets, notebooks, models, and tutorials. Share your work with your team and your peers across job roles.

Join a vibrant community of data scientists, developers, and domain experts across industries, functions, and organization types.



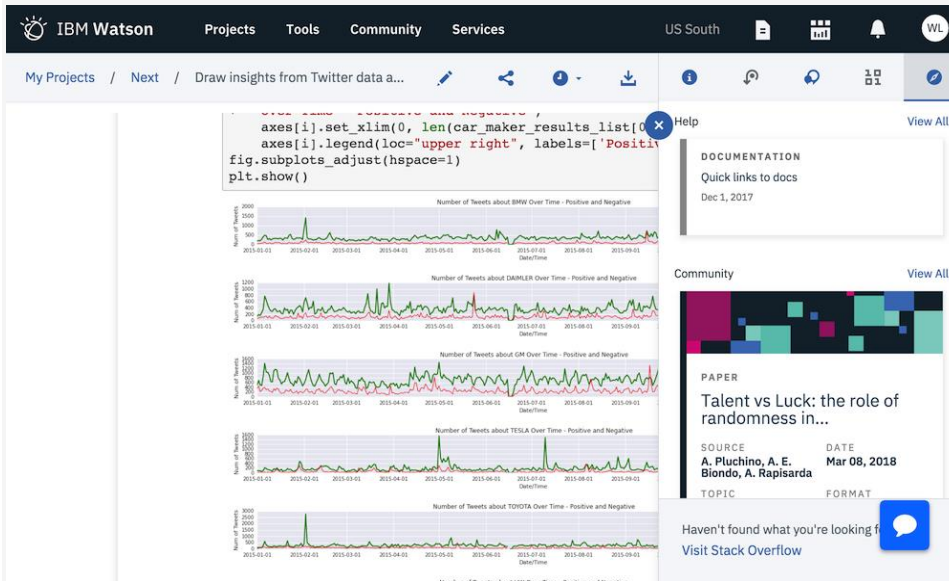
Watson Studio

Features:

4. Collaborate for better outcomes

Work with your peers on projects to find better solutions together.

Share your knowledge and your work easily with visualizations and code - and help fuel the advancement of data science and AI for all.

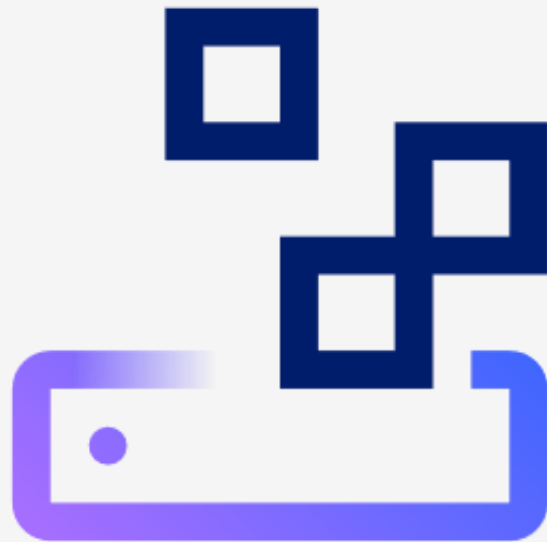


Cloud Object Storage

IBM Cloud Object Storage is a highly scalable cloud storage service, designed for high durability, resiliency and security.

Store, manage and access your data via our self-service portal and RESTful APIs.

Connect applications directly to Cloud Object Storage use other IBM Cloud Services with your data.



Cloud Object Storage

Benefits:

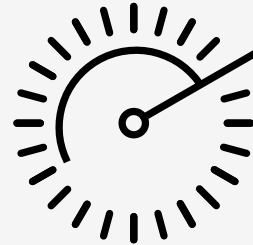
Reduce storage costs

Save on associated storage costs that include server, power, and data center space requirements.



Reduce downtime

Maintain more streamlined storage environments to help lower day-to-day touch points for IT storage teams.



Cortex Certifai

To trust a digital system, we must have confidence in its decisions.

However, AI systems learn and evolve over time and contain many hidden decision processing layers, making auditability and explainability challenging.



www.cognitivescale.com

Cortex Certifai

Explainability, fairness, robustness, and compliance are the anchors of trustworthy AI.

Leaders will soon be required to explain how their automated decision-making systems are making inferences and decisions or risk diminished public trust, revenue losses, and regulatory backlash and fines.



www.cognitivescale.com

Cortex Certifai

Cortex Certifai generates the first-ever composite trust score, the **AI Trust Index**.

The AI Trust Index measures data and model risks related to Performance, Data Quality, Robustness, Explainability, Fairness, and Compliance.

Certifai can be applied to any black-box model including machine learning models, statistical models, business rules, and other predictive models.



www.cognitivescale.com

Cortex Certifai

Why Certifai?

Cortex Certifai helps businesses automate the management of AI Business Risk by answering pressing questions, such as:



**HOW DID THE AI AND MODEL
PREDICT WHAT IT
PREDICTED?**



**HAS THE MODEL BEEN
UNFAIR TO A PARTICULAR
GROUP?**



**IS THE MODEL COMPLIANT
WITH INDUSTRY
REGULATIONS?**



**HOW EASILY CAN THE MODEL
BE FOOLED?**

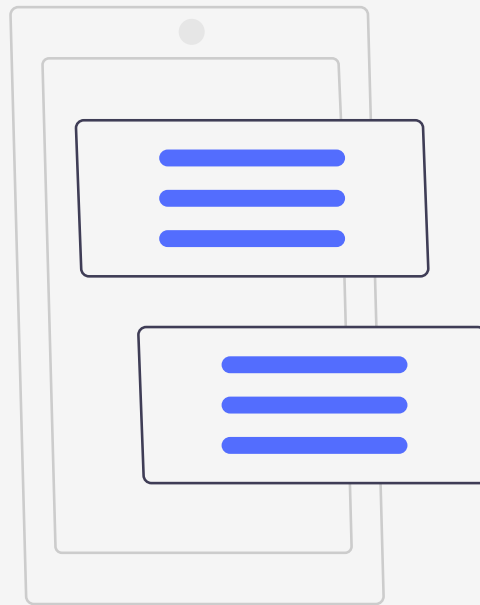
www.cognitivescale.com/certifai

Event Survey

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<https://ibm.biz/BdfhxH>



Thank you

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