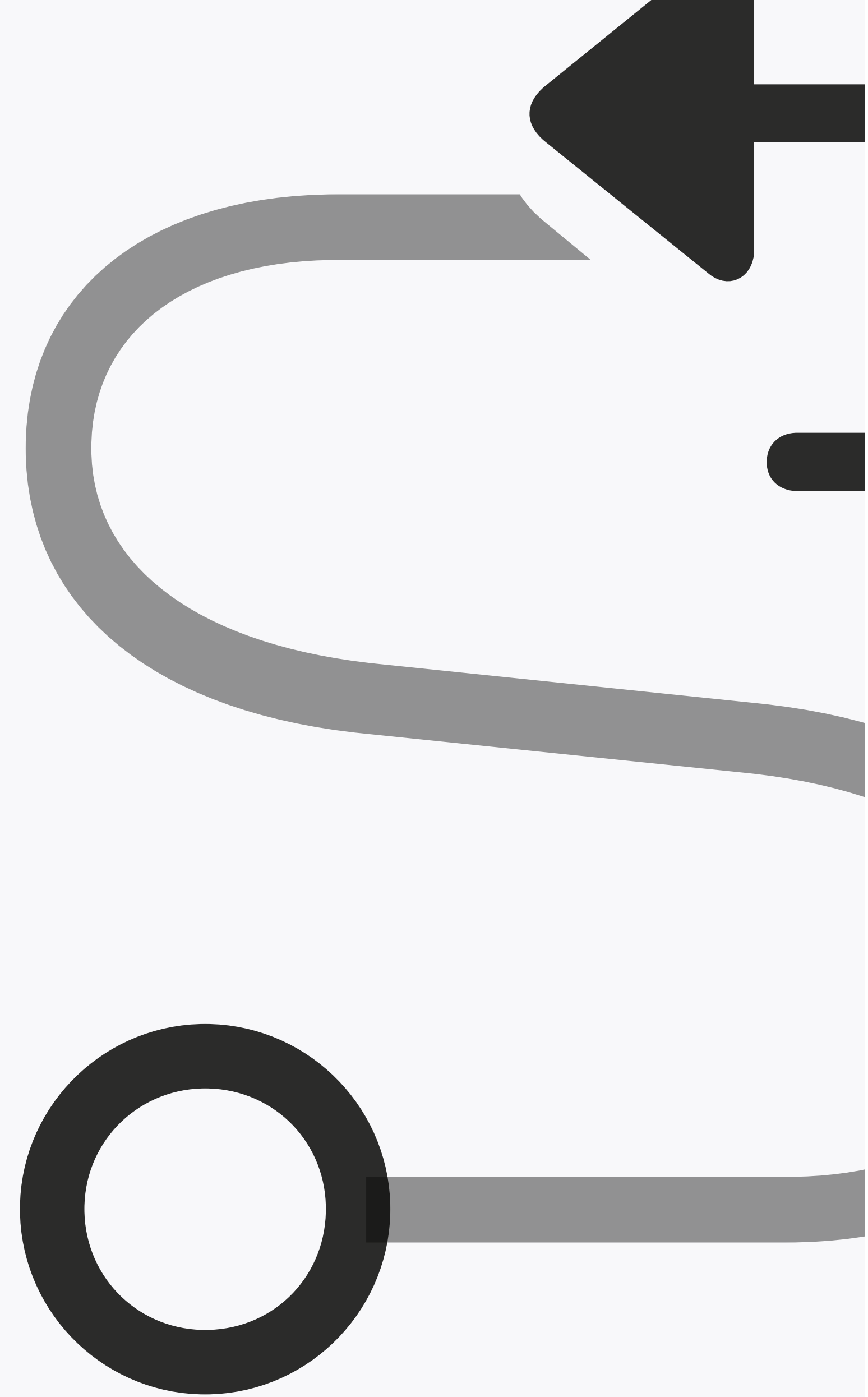


**TrueBlockAI**  
**helping** user to  
**onboard.**

**Qr.** by Qredence



# **Making AI Tools Accessible**

**The challenge of complex AI tools and the barrier to entry**

**The importance of user-friendly interfaces and documentation**

**The role of community support and educational resources**

**How TruLens and similar tools can be made more accessible : where Trueblock comes.**

**RAG Assistant to guide him, explain, outline the whole process.**

**Custom Trulens node in Visual Blocks**

# **The Importance of Good Evaluation in Neural Networks**

## Exploring Explainability and Robustness with Trulens



# Custom Trulens node in Visual Blocks

The screenshot displays the Visual Blocks for ML interface. At the top, there are navigation links for Contact, FAQ, Github, and Community. Below this, there are three demo tabs: Demo: AR Effects, Demo: Low Light Enhancement, and Demo: Create Your Own. The main workspace is titled "EXPERIMENTAL -trulens" and features a central image of two dogs. To the left, there are thumbnails of other images. Below the main image, there are several panels:

- Brightness slider:** A slider ranging from -100 to 0, with a "Reset" button.
- Bounding box visualizer:** A panel showing the same image with bounding boxes around the dogs, labeled with confidence scores: "dog: 0.953" and "dog: 0.875".
- Code editor:** A panel containing Python code for a custom Trulens node:

```
1 A module for Trulens node.  
2 """  
3  
4 import tensorflow as tf  
5 from trulens.nn.models import  
6   get_model_wrapper  
7   from trulens.visualizations import Overlay
```
- Object detection node:** A panel showing the results of the object detection process, including a "Score" of 0.500 and "Max boxes count" of 20.
- Logger:** A panel showing the output of the node, including the label "dog", the score 0.95301526784896, and the bounding box coordinates.

At the bottom, there is a search bar for nodes and a list of available nodes: Input (Camera input, Image input, Sketch input, Speech to text stream), Processor, and Model. A flowchart at the bottom right shows the connection between the Image input node, the Image processor node, the Object detection node, and the Image components node.



# NoteLLM, the next step toward Gemini's most user friendly Q&A doc

The image shows a mobile application interface with two main panels. The left panel, titled 'TruEra Monitoring Datasheet May 19 2021.pdf', contains a 'Source guide' section with a 'Summary' and a 'Key Topics' sidebar. The 'Summary' text reads: 'TruEra Monitoring is a tool that provides a full spectrum view of machine learning models. It offers unique explainability and model quality analytics to quickly identify and troubleshoot issues, saving time and improving governance. TruEra helps organizations easily track and optimize model performance, comply with regulations, and make more effective decisions based on data insights.' The 'Key Topics' sidebar lists: 'Model monitoring', 'Root cause analysis', 'Model explainabili...', 'Bias detection', and 'Model performance'. Below the summary, there is a section titled 'TruEra Monitoring' with the text: 'Make the right call with TruEra's fast, precise, and full spectrum monitoring solution. TruEra Monitoring helps you easily track and troubleshoot machine learning model performance. With unique explainability and model'. The right panel, titled 'Notes', shows a document snippet with the following content: 'Model quality analytics. TruEra Monitoring helps you answer questions like: 

- Which features are contributing to model stability issues?
- Which features are contributing to bias?
- Which features have egregious data quality problems?
- Which segments are most impacted?
- Are there data quality changes from baseline behavior?

 Alerts and notifications: 

- TruEra Monitoring sends alerts on any monitoring diagnostic metric in the dashboard, such as:
  - Model stability
  - Feature influence/stability
  - Feature drift
  - Bias
  - Segment comparisons

 Actionable insights: 


- TruEra Monitoring provides a unique approach to root cause analysis that pinpoints the real problem, fast.

 Here are some of the benefits of using TruEra Monitoring: 

- Improved governance: TruEra Monitoring can help you more easily comply with regulatory guidelines, such as SR11-7 (US), FEAT (Singapore), High-level Principles on Artificial Intelligence (HK), and the Whitepaper on Artificial Intelligence (EU)



# TrueBlockAI, a RAG Assistant (MVP)



## Trueblock


- Qlaus Visual Block
- NoteLM - Google
- Visual Block Example
- Github repository
- Menu item 5


### Trueblock

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- 3. After Model Updates:** Any time the model is updated—whether from new training data, architecture changes, or other modifications—it's important to evaluate the model's performance to ensure the changes had a positive impact.
- 4. Before Deployment:** Before you deploy a model into production, it should go through a rigorous evaluation to ensure that it meets the desired performance benchmarks and behaves as expected on real-world data.
- 5. In Production (Continuously):** Models in production should be monitored and evaluated continuously to detect any degradation in performance, which could be due to changes in the underlying data distribution (concept drift) or other factors.
- 6. When Expanding to New Use Cases:** If a model is being considered for new applications, it should be evaluated specifically for performance on those new use cases before it is extended or repurposed.
- 7. During A/B Testing:** When comparing models to decide which to deploy, A/B testing can be used, which involves evaluating models side by side on the same data.
- 8. After Data Updates or Addition:** When new data is added to the training set or when the data itself changes, it's necessary to re-evaluate the model to ensure it still performs well.
- 9. Periodically Over Time:** Even if nothing has changed, it's good practice to periodically re-evaluate models to ensure they continue to perform as expected.
- 10. When Gathering User Feedback:** After gathering user feedback, whether through binary feedback or more detailed evaluations, models should be assessed to understand user satisfaction better and improve accordingly.

Model evaluation involves multiple metrics that give insights into various aspects of model performance, such as accuracy, precision, recall, F1 score, the area under the ROC curve (AUC), and mean squared error (MSE) for regression tasks. The choice of metrics and the frequency of evaluations depend on the use case, the importance of the model decisions, and the cost of mistakes.

 1 minute ago  
should we evaluate then build initial app ?

 **Trueblock** less than a minute ago  
Evaluating your application after building the initial version is a crucial step in the development process. Here's why it's important and when it should be done:

- 1. To Validate Assumptions:** Initial evaluations help determine if the app correctly implements the theoretical model or assumptions you designed. It serves to validate that the application behaves as expected in a controlled environment.
- 2. To Identify Immediate Issues:** Evaluating an app early can quickly highlight any critical issues, such as crashes, incorrect outputs, or performance problems, allowing for prompt fixes.
- 3. To Establish Baselines:** The evaluation of your initial app establishes performance baselines that future versions of the application can be compared against, helping to track improvements over time.
- 4. To Enable Iterative Improvement:** Early evaluations allow you to start an iterative process of improvement. Based on the results, you can make informed decisions on what aspects of the app need refinement or redevelopment.
- 5. To Assess User Experience:** If the initial evaluation involves user feedback, it can provide valuable insights into the app's user interface and user experience, which can be critical for adoption and user satisfaction.
- 6. To Align With Business Goals:** Early evaluation ensures that the app meets the business objectives and provides the value it's intended to, which could be

### Informations

**Hackathon**  
Gemini LabLabs

**Teams**  
[Qredence](#)

**Description**  
This dual-faceted project represents a significant leap in making complex data analysis more accessible, intuitive, and effective. By focusing on both the interactive aspect of data analysis and the comprehensibility of the associated documentation, we aim to democratize advanced data analytics tools, making them a staple in the toolbox of data professionals and enthusiasts alike.

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