TruEra Monitoring

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 quality analytics, TruEra Monitoring goes beyond basic observability solutions by enabling full spectrum visibility and faster root cause analysis and action. This saves ML ops and data scientist time, improves governance, and provides a more effective feedback loop to optimize both models and business outcomes.

Key benefits

- **The broadest and deepest view into model performance**
  Get a full spectrum view into your models, with analytics that you can’t find anywhere else.

- **Optimize team time with fewer wild goose chases and dead ends**
  Based on over six years of research, TruEra’s unique approach pinpoints the real problem, fast.

- **Enable fast action—know where to look and what to fix**
  With more reliable analyses of root causes, your data science and MLOps teams stay focused.

- **Easily comply with regulatory guidelines**
  More easily comply with artificial intelligence guidelines and regulations, such as SR11-7 (US), FEAT (Singapore), High-level Principles on Artificial Intelligence (HK), and the Whitepaper on Artificial Intelligence (EU).
Key capabilities

Performance visibility

Model quality dashboards
For each machine learning model, TruEra provides a comprehensive dashboard of key metrics. Top level diagnostics include:

- Model performance (actual or estimated accuracy, decision trends)
- Model score drift (distribution and stability score)
- Feature drift (model inputs)
- Bias: disparate impact
- Data quality trends (rule violations)

Model overwatch dashboard
A quick summary of 100s of models, highlighting which need quick attention and which are performing at expectation.

Bias Tracking

Model score disparity analysis
Quickly understand the impact of protected features on model outputs.

Feature contributions of bias impact analysis
Get visibility into the feature contributions to overall model bias for protected classes, to analyze whether variable treatment is justified or unjustified. This is unique to TruEra.

Diagnosis

Root cause analysis
TruEra 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?

Featuring analyses unique to TruEra

- Drivers of model instability
- Estimated AUC, with and without data labels
- Drivers of model bias
TruEra Monitoring

Key capabilities

Alerts and notifications

Alerts on any monitoring diagnostic metric in the dashboard, such as:
- Model stability
- Feature influence/stability
- Feature drift
- Bias
- Segment comparisons for all of the above

Alert configuration
Set triggers, evaluation frequency, messaging, tags, user notifications, channels, and error handling, among others.

Notifications across 19 communication channels.
Use the most popular communications tools, such as:
- Email
- Pager Duty
- Webhooks
- Slack

Tracking of issue drivers and common resolutions with annotations for alerts, anomalies, outcomes, and resolutions.

Integration and workflow

TruEra is quick and easy to deploy, even in complex enterprise environments.

- Deploy on-premises or on your cloud, including public cloud providers like AWS, Google, or Azure.
- Fast setup and easy user administration with SSO integration and local TruEra authentication.
- Easy integration to common model serving infrastructure such as Sagemaker and Algorithmia.
- Scale quickly for high volumes of ML models
- Easily export data via APIs for integrations to applications or business intelligence solutions, such as Tableau and Looker.

We see TruEra as an essential partner... in how we build and operationalize higher-quality, trusted AI models faster and more efficiently.

- Vishu Ramachandran, Global Head, Retail Banking, Standard Chartered