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MONITORING

MONITORING MACHINE LEARNING

FREE
FREE
FREE

Use Deepchecks holistic FREE open-source solution for data integrity, validation, and performance evaluation.

https://docs.deepchecks.com/monitoring/

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A COMMUNITY FAVORITE

NOW FREE

Deepchecks Monitoring is now freely available as an open-source tool, empowering the community to validate AI and ML data and models throughout the development process.

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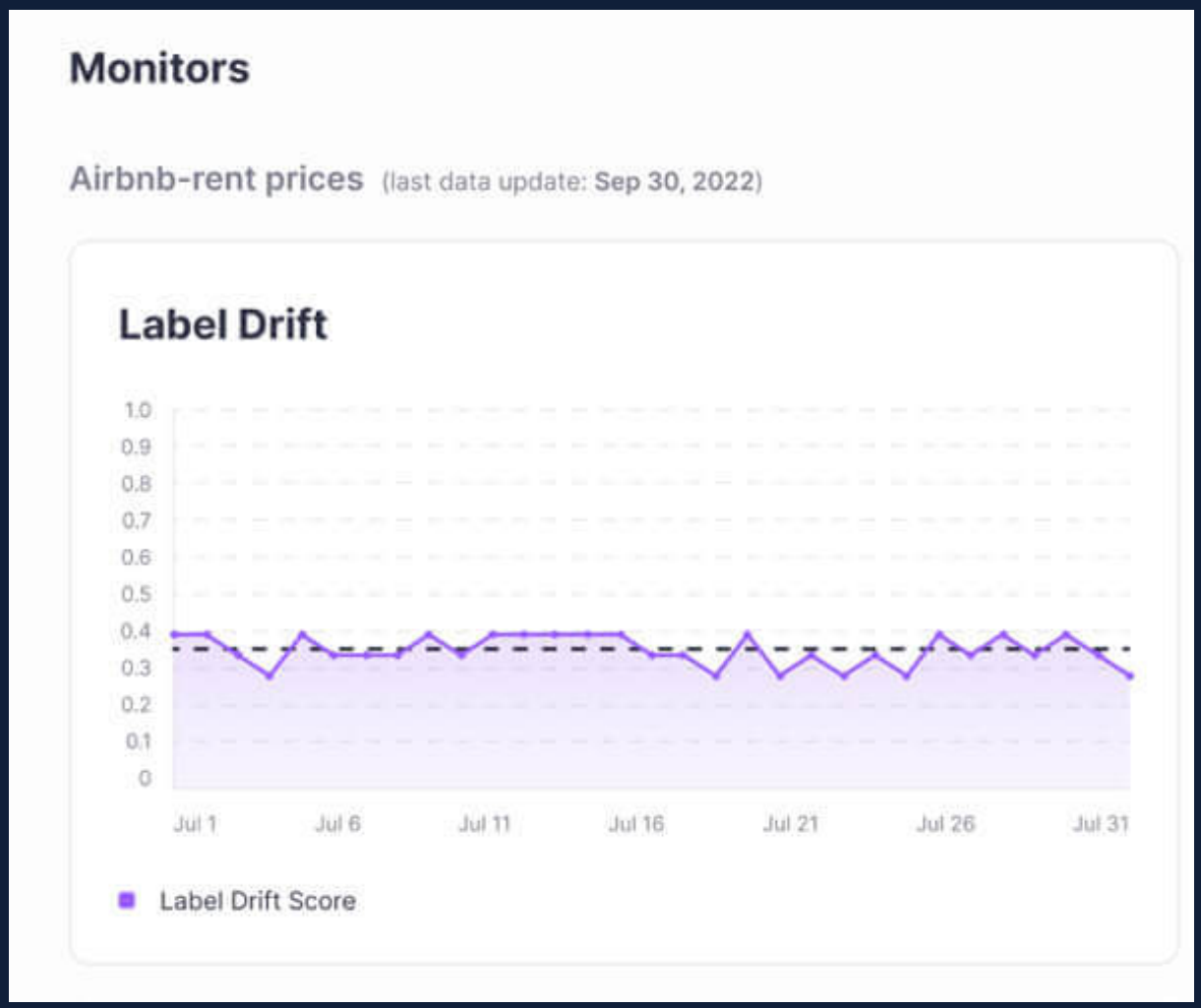
ML VALIDATION



With comprehensive support for your testing requirements, Deepchecks Monitoring ensures data integrity, distribution assessment, and performance evaluation.

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GETTING STARTED

It's as easy as downloading Deepchecks, setting up a model, uploading data, and setting alerts in the system!

```
# Install deepchecks-client with pip
> pip install deepchecks-client --upgrade

# Or install by running
> import sys
  !{sys.executable} -m pip install -U
  deepchecks-client
```

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PREPARE YOUR MODEL

To create a new model version, define the feature schema, provide reference data, prepare the reference data by loading it and optionally providing feature importance.

```
# Create the Dataset object

from deepchecks.tabular.datasets.regression.airbnb
import load_data,  load_pre_calculated_prediction,  \
load_pre_calculated_feature_importance

ref_dataset, _ = load_data(data_format='Dataset')
ref_predictions, _ = load_pre_calculated_prediction()
feature_importance = load_pre_calculated_feature_importance()
```

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CREATE THE DATA SCHEMA

Generate and review the schema file that describes the data associated with the model version.

```
# Create and review the schema file

from deepchecks_client
import DeepchecksClient, create_schema, read_schema

schema_file_path = 'schema_file.yaml'
create_schema(dataset=ref_dataset, schema_output_file=schema_file_path)
read_schema(schema_file_path)
```

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CREATE A MODEL VERSION

Create an organization, obtain an API token, and use it to create a new model version.

```
# Point the host to Deepchecks app
import os
host = os.environ.get('DEEPCHECKS_API_HOST')
dc_client = DeepchecksClient(host=host,
token=os.getenv('DEEPCHECKS_API_TOKEN'))
model_name = 'Airbnb'
model_version = dc_client.create_tabular_model_version(
 model_name=model_name, schema=schema_file_path,
feature_importance=feature_importance,
reference_dataset=ref_dataset,
reference_predictions=ref_predictions, task_type='regression')
```

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ADD PRODUCTION DATA

Upload production data and predictions for monitoring, and update the labels if necessary.

```
# Add production data you want to monitor
model_version.log_batch(sample_ids=prod_data.index,
data=prod_data, timestamps=timestamp_col,
predictions=prod_predictions)
```

AND YOU'RE DONE!

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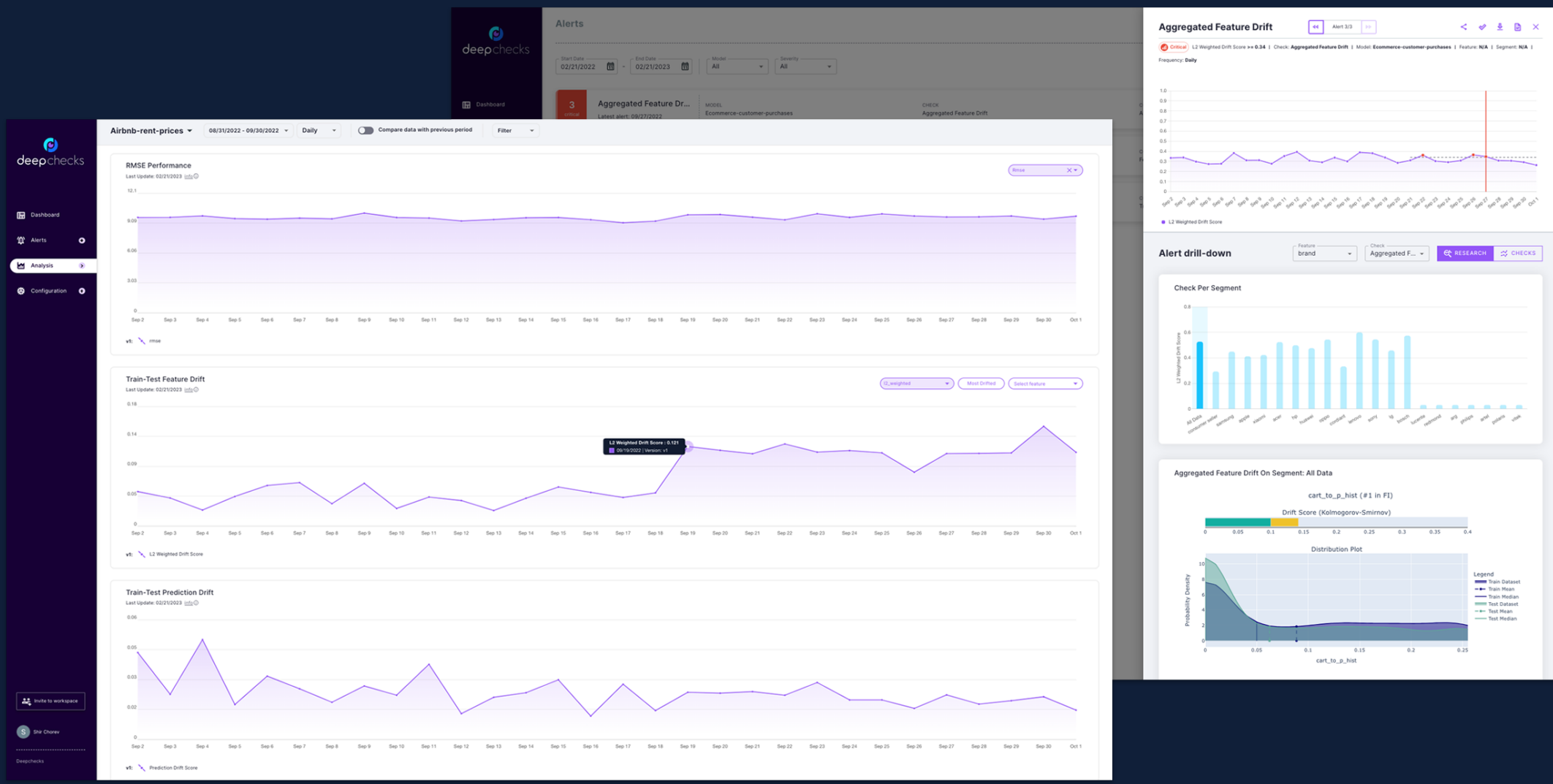
START MONITORING YOUR MODELS



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THANKS FOR READING!

READ THE QUICKSTART GUIDE TO LEARN MORE!

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https://www.rebeldatascience.com/

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