Introduction to Vertex AI (formerly AutoML)

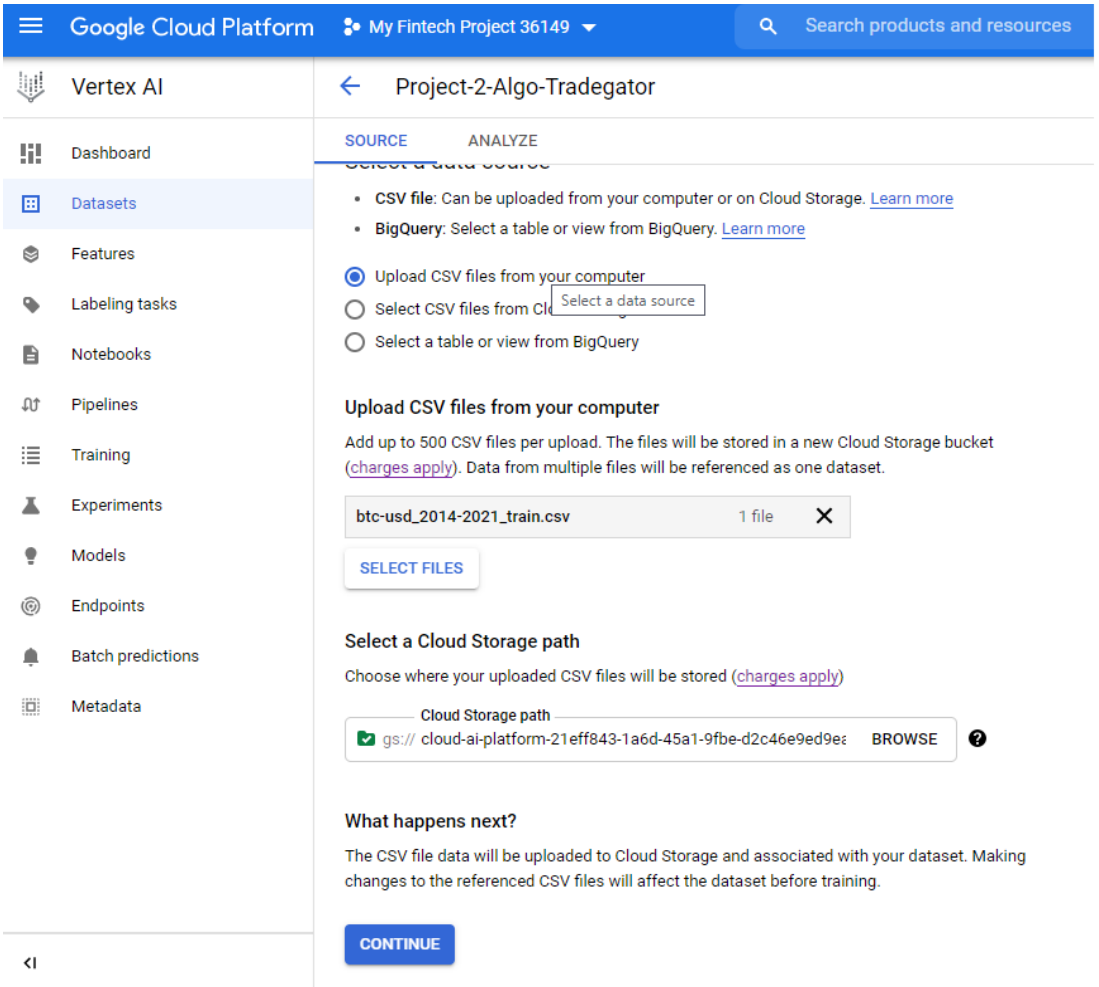
https://cloud.google.com/vertex-ai/docs/start/introduction-unified-platform

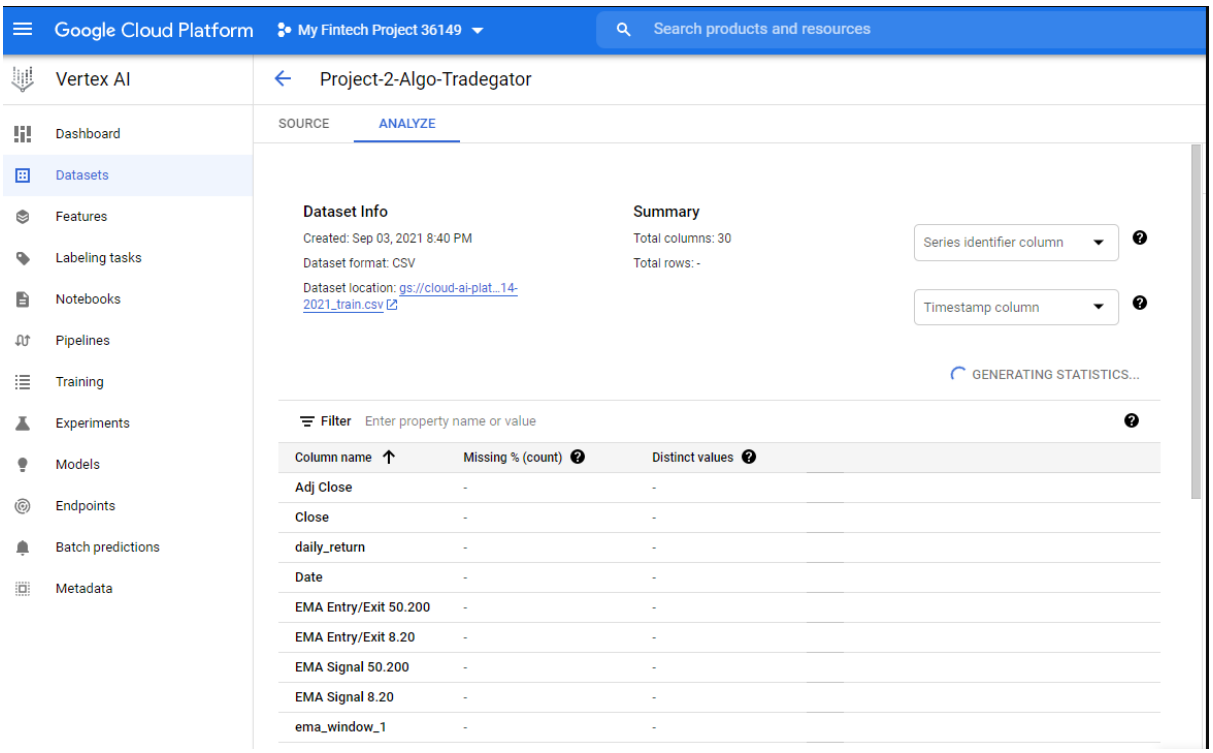
Vertex AI brings AutoML and AI Platform together into a unified API, client library, and user interface. AutoML allows you to train models on image, tabular, text, and video datasets without writing code, while training in AI Platform lets you run custom training code. With Vertex AI, both AutoML training and *custom training* are available options. Whichever option you choose for training, you can save models, deploy models and request predictions with Vertex AI.

You can use Vertex AI to manage the following stages in the ML workflow:

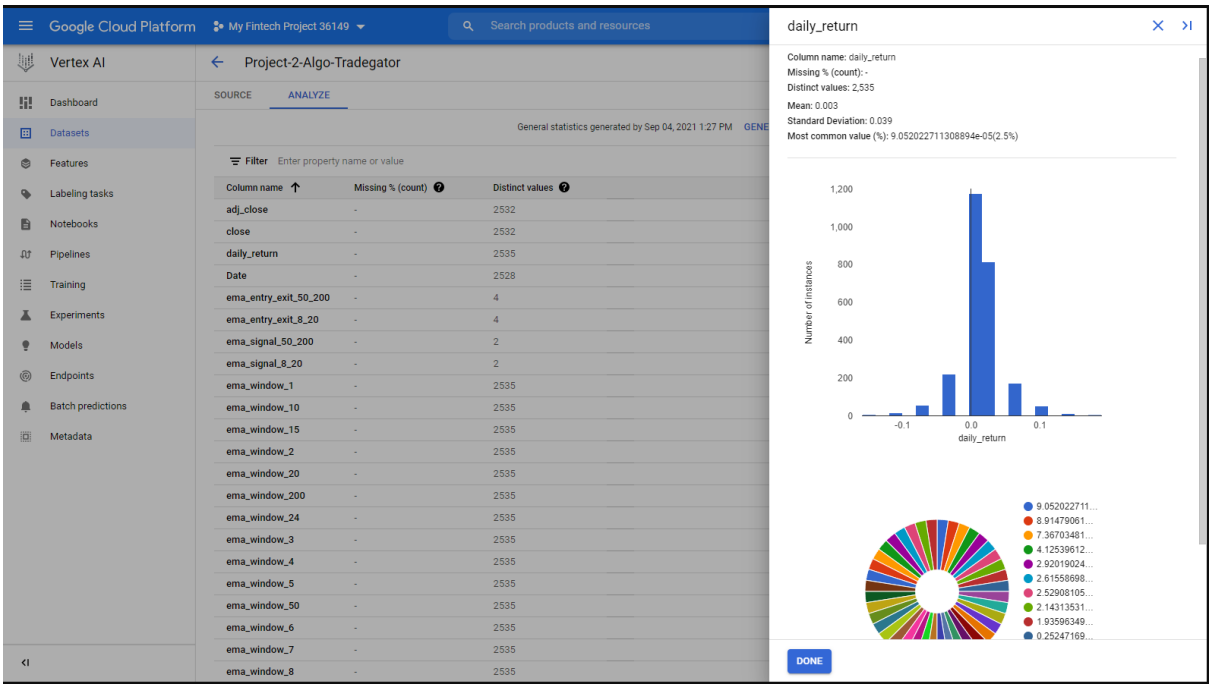
- Create a dataset and upload data.
- Train an ML model on your data:
  - Train the model
  - Evaluate model accuracy
  - Tune hyperparameters (custom training only)
- Upload and store your model in Vertex AI.
- Deploy your trained model to an endpoint for serving predictions.
- Send prediction requests to your endpoint.
- Specify a prediction traffic split in your endpoint.
- Manage your models and endpoints.

Step 1: .csv upload. It's also possible to access Vertex via API.

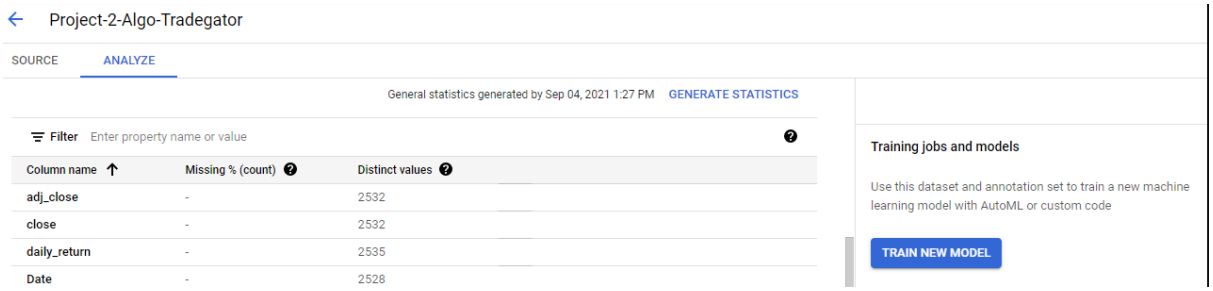


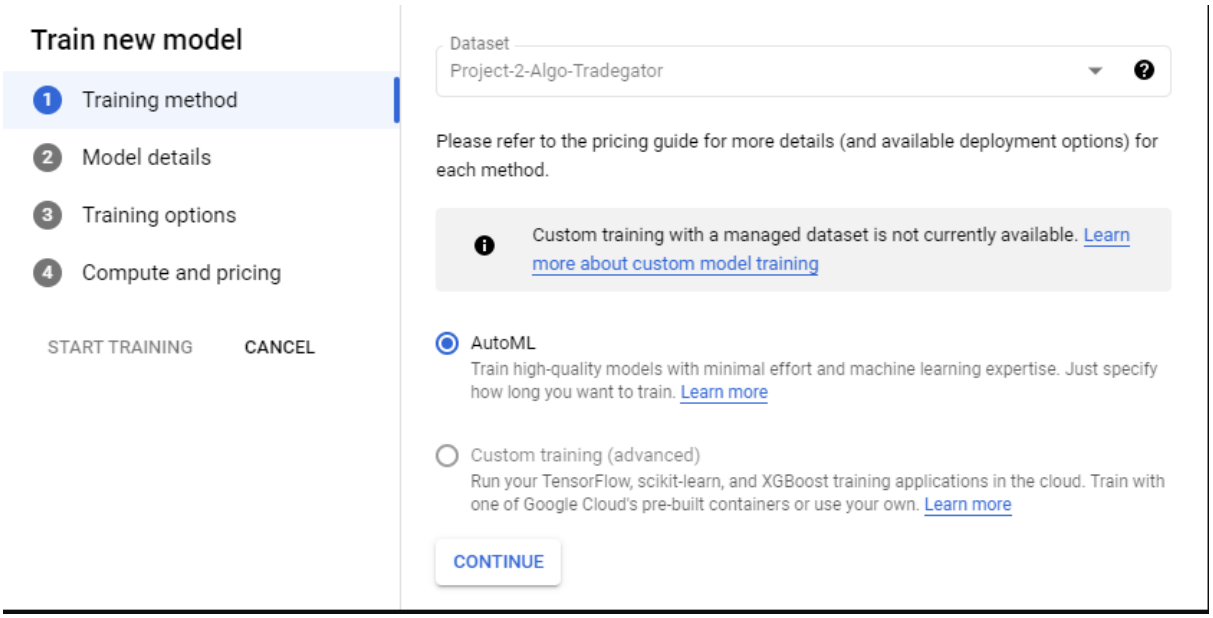


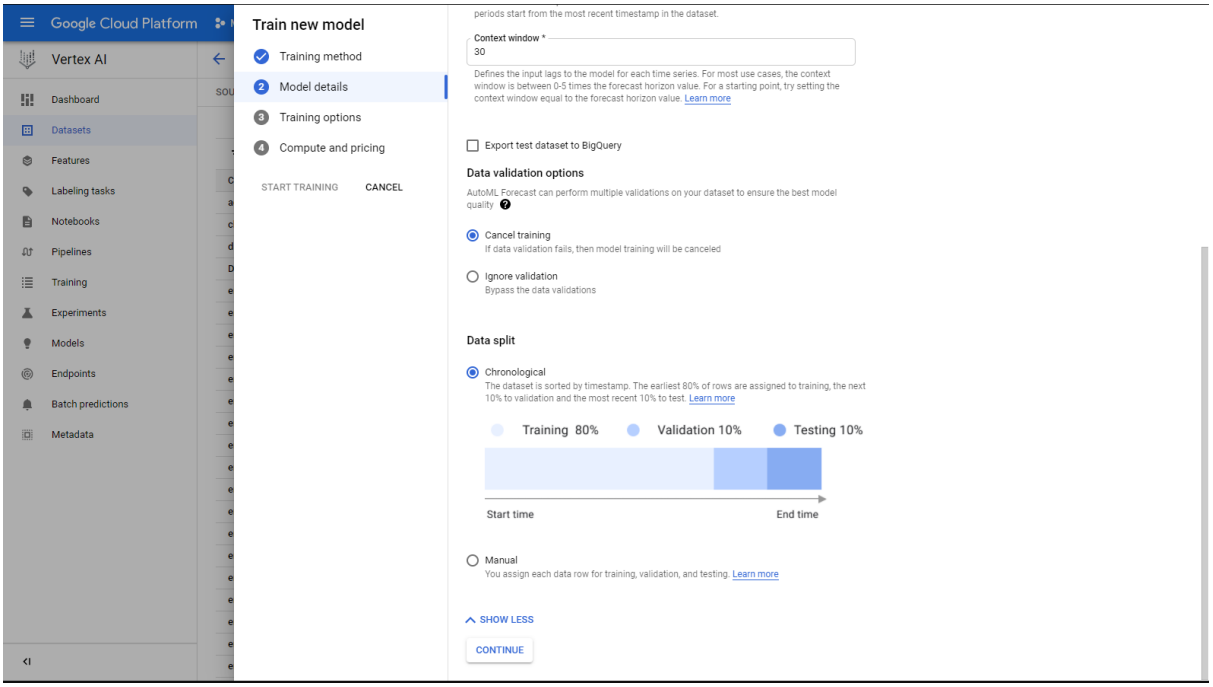
Step 2: All data uploaded and visualization options

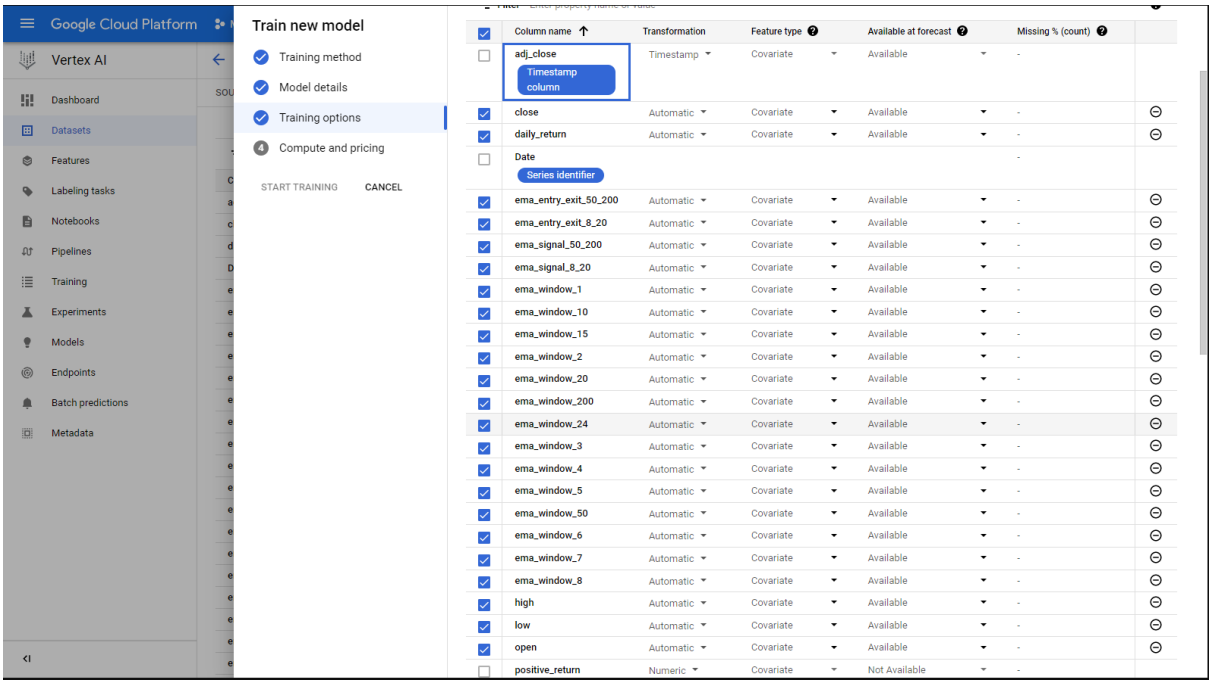


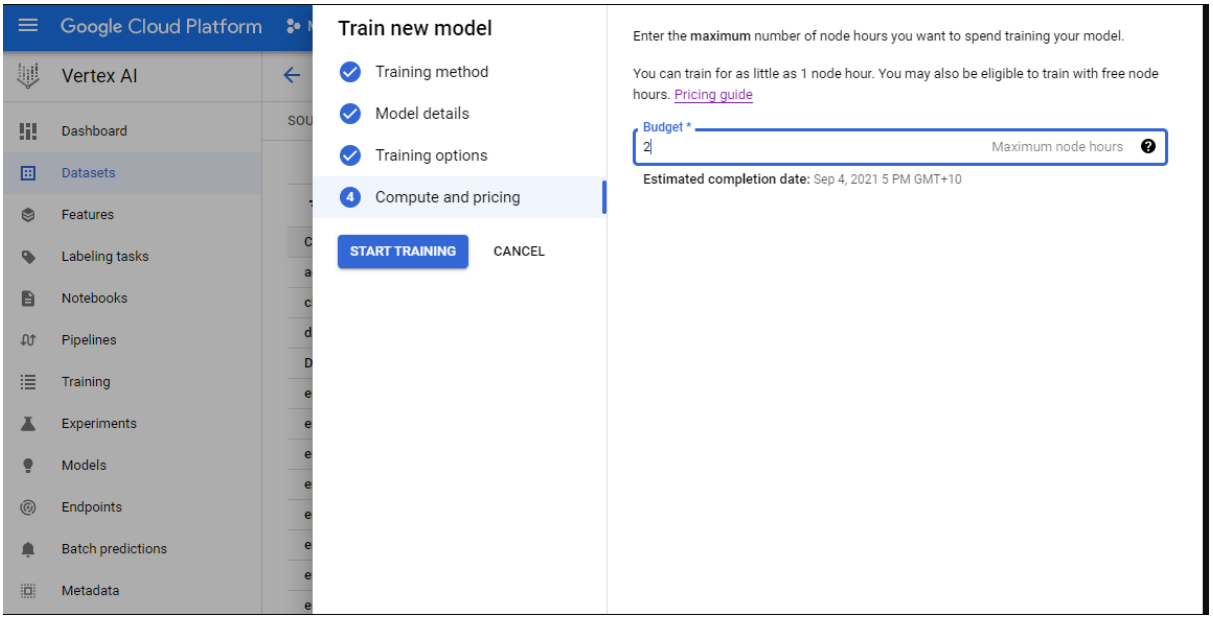
Step 3: Training the model








Google Cloud Platform
Vertex AI
Dashboard
Datasets
Features
Labeling tasks
Notebooks
Pipelines
Training
Experiments
Models
Endpoints
Batch predictions
Metadata
Train new model
Training method
Model details
Training options
Compute and pricing
START TRAINING
CANCEL
Column name
Transformation
Feature type
Available at forecast
Missing % (count)
adj_close
Timestamp column
Timestamp
Covariate
Available
close
daily_return
Automatic
Date
Series identifier
ema_entry_exit_50_200
ema_entry_exit_8_20
ema_signal_50_200
ema_signal_8_20
ema_window_1
ema_window_10
ema_window_15
ema_window_2
ema_window_20
ema_window_200
ema_window_24
ema_window_3
ema_window_4
ema_window_5
ema_window_50
ema_window_6
ema_window_7
ema_window_8
high
low
open
positive_return
Numeric
Not Available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Train new model
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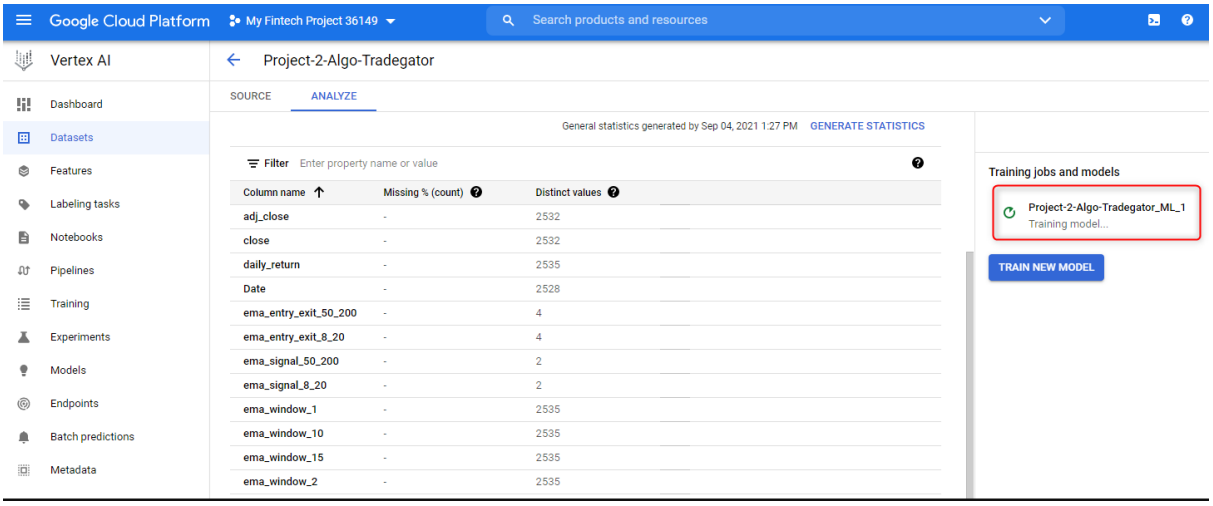
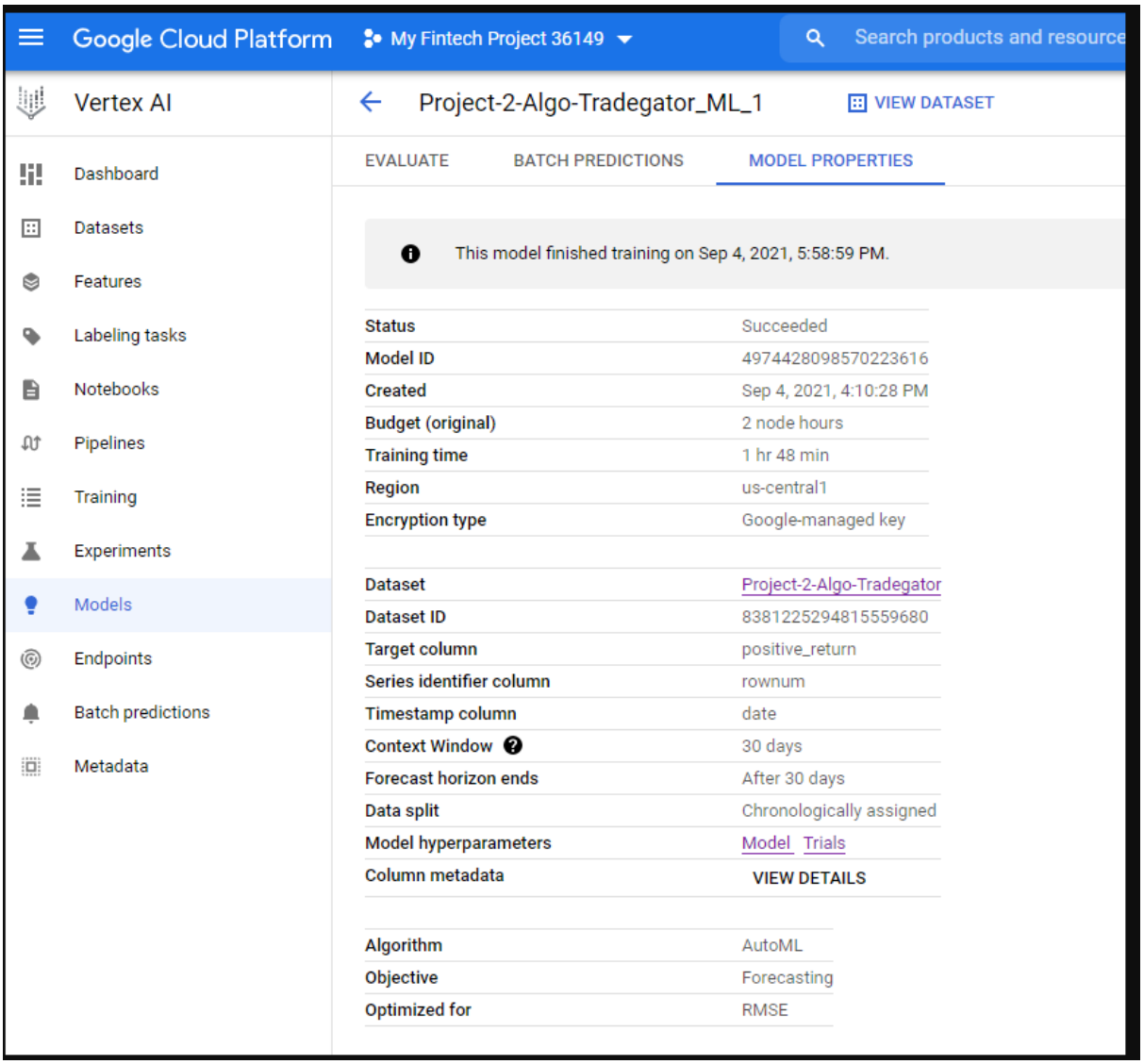
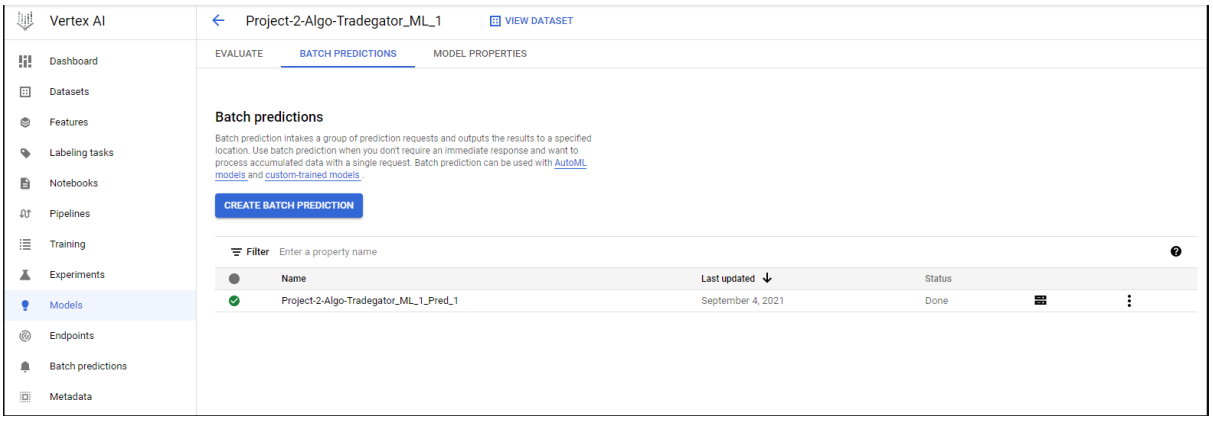
START TRAINING
CANCEL
Enter the maximum number of node hours you want to spend training your model.
You can train for as little as 1 node hour. You may also be eligible to train with free node hours. Pricing guide
Budget *
2
Maximum node hours
Estimated completion date: Sep 4, 2021 5 PM GMT+10


Google Cloud Platform
My Fintech Project 36149
Search products and resources
Vertex AI
Project-2-Algo-Tradegator
SOURCE
ANALYZE
General statistics generated by Sep 04, 2021 1:27 PM
GENERATE STATISTICS
Filter
Enter property name or value
Column name
Missing % (count)
Distinct values
adj_close 2532
close 2532
daily_return 2535
Date 2528
ema_entry_exit_50_200 4
ema_entry_exit_8_20 4
ema_signal_50_200 2
ema_signal_8_20 2
ema_window_1 2535
ema_window_10 2535
ema_window_15 2535
ema_window_2 2535
Training jobs and models
Project-2-Algo-Tradegator_ML_1
Training model...
TRAIN NEW MODEL

Step 4: Model trained - (takes some time)






THREE
HOURS LATER