

Amazon SageMaker Canvas Workshop

Michael Lin
Sr. Solutions Architect
Amazon Web Services



<https://t.ly/JdnnC>



Sign in

Choose a preferred sign-in method

Email one-time password (OTP)

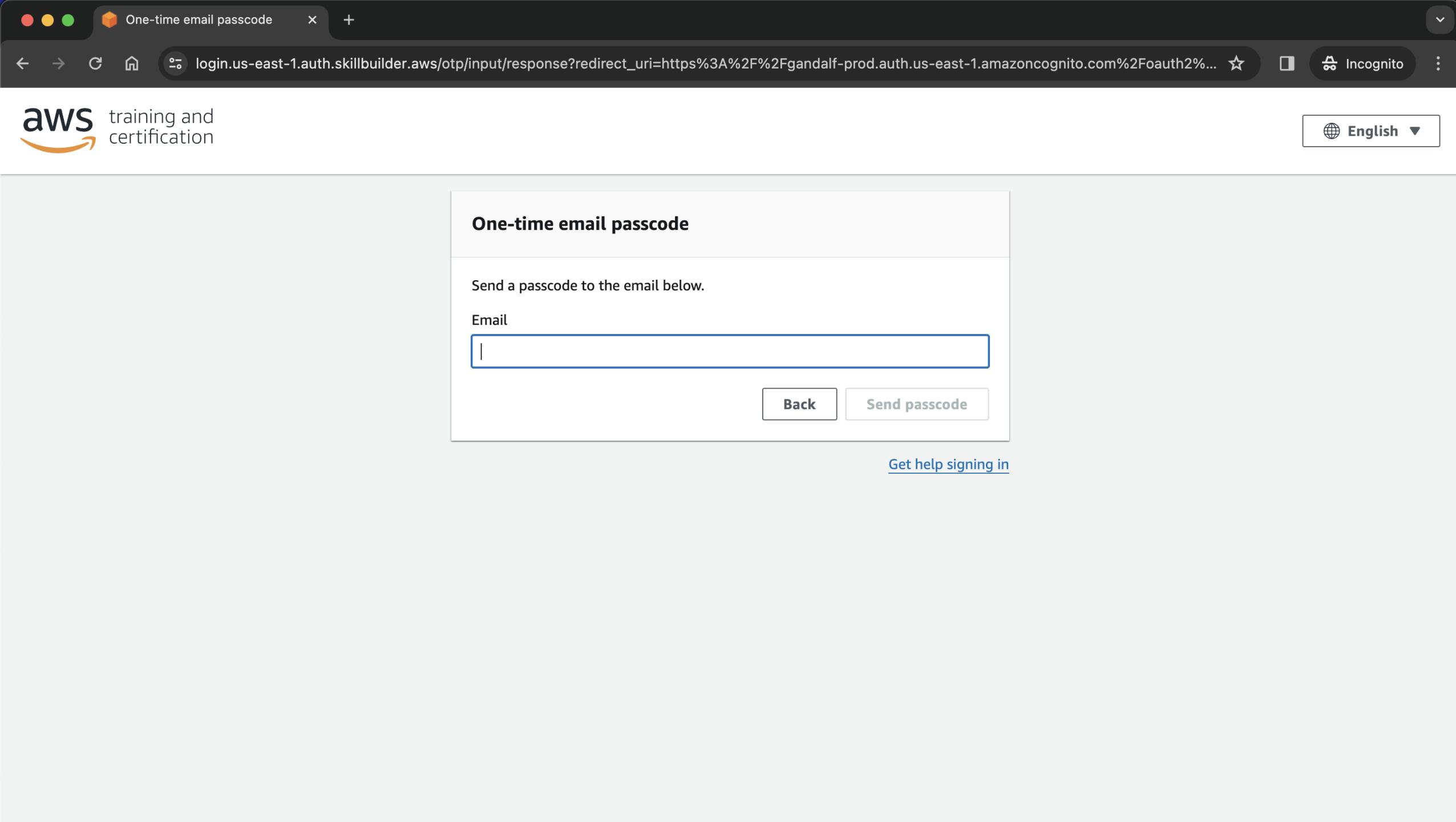
Enter your personal or corporate email to receive a one-time password

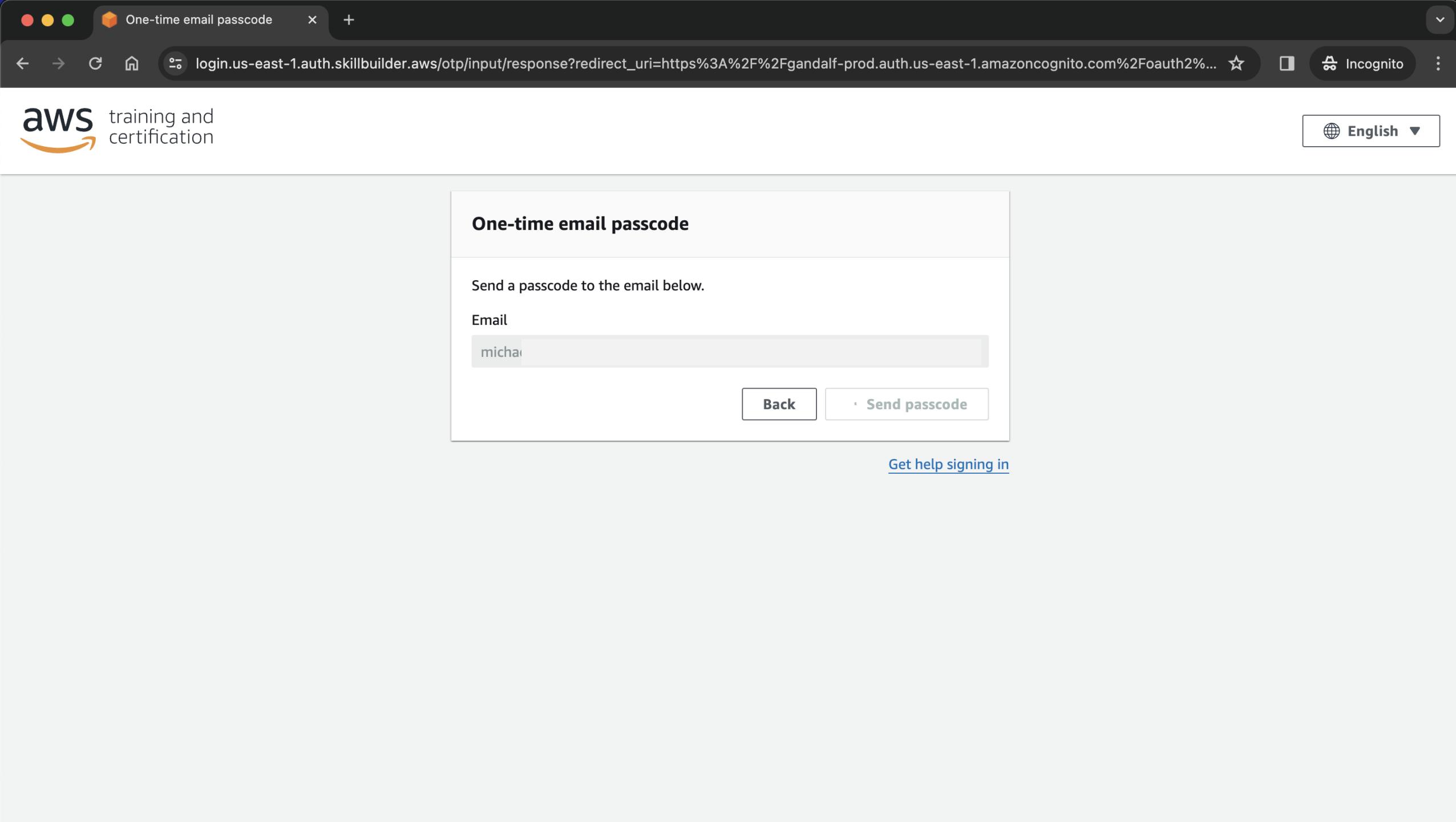
AWS Builder ID

Login with AWS Builder ID, a new personal profile for builders

Amazon employee

Login with your Amazon Corporate account. Only for Amazon Employees.





A screenshot of a web browser window. The title bar says "Verify one-time email passcode". The address bar shows the URL: "login.us-east-1.auth.skillbuilder.aws/otp/challenge?redirect_uri=https%3A%2F%2Fgandalf-prod.auth.us-east-1.amazoncognito.com%2Foauth2%2Fidp...". The page content is an "One-time email passcode" screen from AWS. It includes the AWS logo and a language selection dropdown set to "English".

aws training and certification

English

One-time email passcode

We sent a passcode to michael_tw_lin@msn.com. You should receive it within 5 minutes.

Passcode (9-digit) | [Resend passcode](#)

666882875

Back

Sign in

[Get help signing in](#)

Step 1

Enter event access code

Step 2

Review and join

Enter event access code

Event access code

Event access code

A 12 digit code that was given to you for this event

caa0-040ce3-4a

[Cancel](#)[Next](#)



Step 1

[Enter event access code](#)

Step 2

[Review and join](#)

Review and join

Event details

Name

Start time

Duration

Level

2/01/2024 03:18 PM

72 hours

200

Description

nwa-canvas-dryrun

Terms and Conditions

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Country or region

Minimum age

All countries or regions not listed below (including the United States, Brazil, the United Kingdom, Australia, Canada, France, Germany, Italy, Spain, Sweden, Switzerland, and the Netherlands) are prohibited from participating in the relevant event.

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Cancel

Previous

Join event



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I agree with the Terms and Conditions

Cancel

Previous

Join event



catalog.us-east-1.prod.workshops.aws/event/dashboard/en-US

michael_tw_lin

nwa-canvas-dryrun

Amazon SageMaker Canvas Immersion Day

- What is Amazon SageMaker Canvas?
- Prerequisites
- Use case labs
- Technology Labs
- Generative AI
- Changelog and Updates

AWS account access

- Open AWS console (us-east-1)
- Get AWS CLI credentials

Content preferences

- Language: English

Exit event

Event ends in 2 days 16 hours 53 minutes.

Event dashboard > Amazon SageMaker Canvas Immersion Day

Event information

Start time	Duration	Accessible regions
2/01/2024 03:18 PM	72 hours	us-east-1

Description
nwa-canvas-dryrun

Workshop

[Get started >](#)

Title	Complexity level	AWS services	Topics
Amazon SageMaker Canvas Immersion Day	200	Amazon SageMaker	Machine Learning (ML/AI)

Description
A 4-hours Immersion day that goes through the details of Amazon SageMaker Canvas, the different features it comprises, and the different use cases it helps solve. Note: if you don't wait for the output of every Standard Build, this workshop can take even less than the suggested time.

catalog.us-east-1.prod.workshops.aws/event/dashboard/en-US

michael_tw_lin

nwa-canvas-dryrun

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Description
nwa-canvas-dryrun

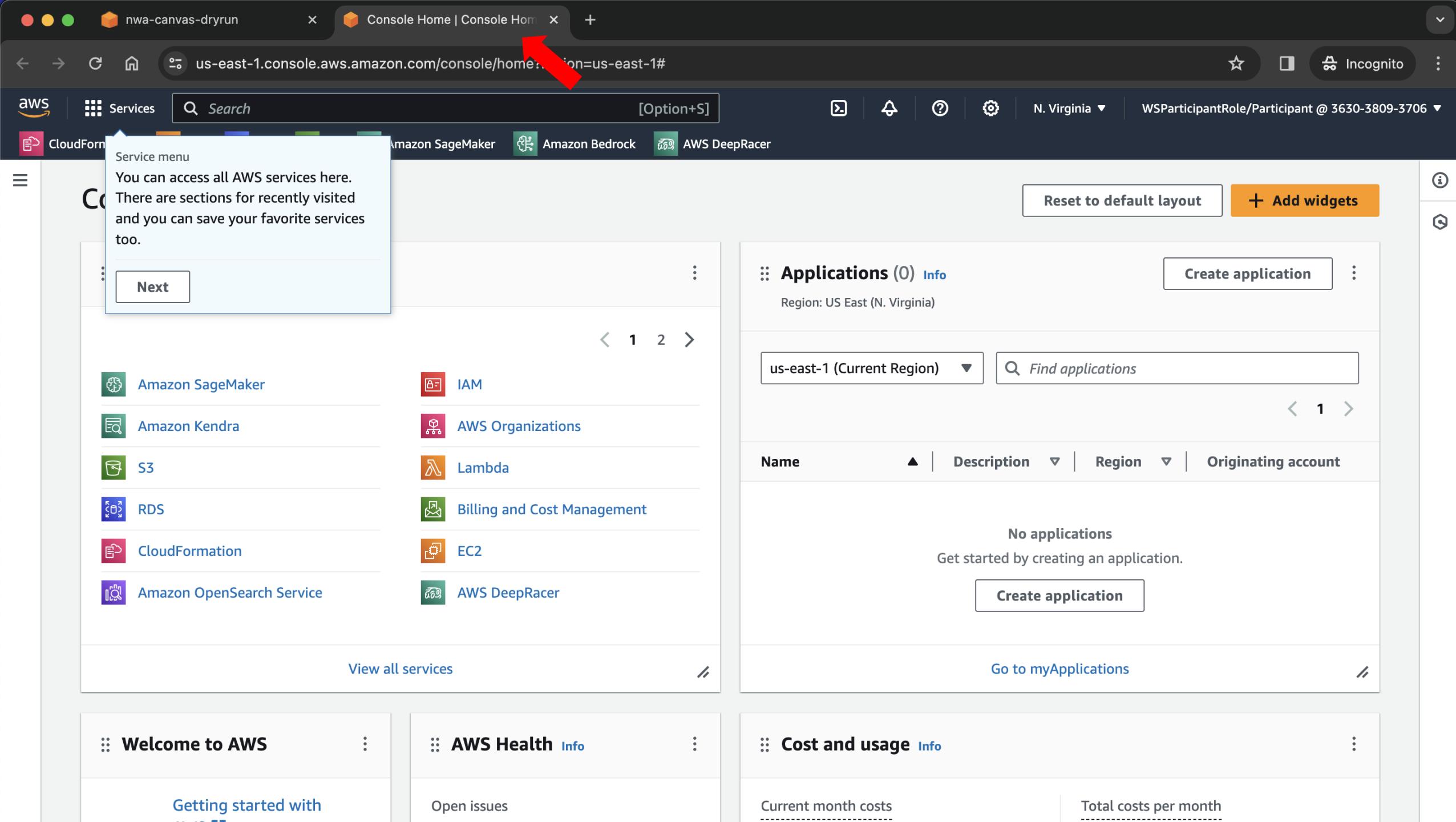
Workshop

Get started >

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Lab Exercises

- Customer Churn
- Defect Detection
- Text Analysis
- Generative AI
- Information Extraction

<https://t.ly/uVrwv>

Amazon SageMaker Canvas Immersion Day

What is Amazon SageMaker Canvas?

▼ Prerequisites

AWS Workshop Portal

Self-Paced Lab

▼ Use case labs

Lab 1 - Customer Churn (Marketing)

Lab 2 - Housing Prices (Real Estate)

Lab 3 - Demand Forecasting (Retail)

Lab 4 - Loan Default Prediction (Financial Services)

Lab 5 - Diabetic Patient Readmission Prediction (Healthcare & Life Sciences)

Lab 6 - Predicting Machine Failure Types (Manufacturing)

Amazon SageMaker Canvas Immersion Day >  Use case labs > Lab 1 - Customer Churn (Marketing)

Lab 1 - Customer Churn (Marketing)

 Make sure you have performed the steps described in the [Prerequisites](#) section before beginning this lab.

Agenda

1. Overview
 2. The dataset
 3. Building the ML model
 1. Import the dataset
 2. Configuring the model training
 3. Exploratory Data Analysis and Data Preparation
 4. Training the model
 4. Using the model to generate predictions
 1. Single prediction
 2. Batch prediction
 5. Optional: Model Deployment
 6. Optional: View Notebook
 7. Next Steps

catalog.us-east-1.prod.workshops.aws/workshops/80ba0ea5-7cf9-4b8c-9d3f-1cd988b6c071/en-US/1-use-cases/1-marketing

aws workshop studio

Amazon SageMaker Canvas Immersion Day

What is Amazon SageMaker Canvas?

Prerequisites

- AWS Workshop Portal
- Self-Paced Lab

Use case labs

- Lab 1 - Customer Churn (Marketing)**
- Lab 2 - Housing Prices (Real Estate)
- Lab 3 - Demand Forecasting (Retail)
- Lab 4 - Loan Default Prediction (Financial Services)
- Lab 5 - Diabetic Patient Readmission Prediction (Healthcare & Life Sciences)
- Lab 6 - Predicting Machine Failure Types (Manufacturing)

Content preferences

Language: English

Overview

In this lab, we assume the role of a marketing analyst in the marketing department of a mobile phone operator. We have been tasked with identifying customers that are potentially at risk of churning. We have access to service usage and other customer behavior data, and want to know if this data can help explain why a customer would leave. If we can identify factors that explain churn, then we can take corrective actions to change predicted behavior, such as running targeted retention campaigns.

The dataset

[Download the dataset](#)

For our dataset, we use a synthetic dataset from a telecommunications mobile phone carrier. This sample dataset contains 5,000 records, where each record uses 21 attributes to describe the customer profile.

Your marketing team has informed you that this column indicates whether the customer left the service (true/false). The last attribute, **Churn**, is the attribute that we want the ML model to predict. The target attribute is binary, meaning our model predicts the output as one of two categories (True or False).

▶ Overview of the dataset fields

Building and training the ML model

The first step in creating a model with SageMaker Canvas is to start with uploading your dataset. Let's head over to the **My models** section by clicking the second button in the left-side navigation menu, then click on **+ New model**.

 My models

Search models

+ New model

Grid List

2

catalog.us-east-1.prod.workshops.aws/workshops/80ba0ea5-7cf9-4b8c-9d3f-1cd988b6c071/en-US/1-use-cases/1-marketing

aws workshop studio

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Amazon SageMaker Canvas Immersion Day

What is Amazon SageMaker Canvas?

Prerequisites

- AWS Workshop Portal
- Self-Paced Lab

Use case labs

- Lab 1 - Customer Churn (Marketing)**
- Lab 2 - Housing Prices (Real Estate)
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- Lab 5 - Diabetic Patient Readmission Prediction (Healthcare & Life Sciences)
- Lab 6 - Predicting Machine Failure Types (Manufacturing)

Content preferences

Language

Overview of the dataset fields

Field	Description
State	The US state in which the customer resides, indicated by a two-letter abbreviation; for example, OH or NJ
Account_Length	The number of days that this account has been active
Area_Code	The three-digit area code of the customer's phone number
Phone	The remaining seven-digit phone number
Intl_Plan	Whether the customer has an international calling plan (yes/no)
VMail_Plan	Whether the customer has a voice mail feature (yes/no)
VMail_Message	The average number of voice mail messages per month
Day_Mins	The total number of calling minutes used during the day
Day_Calls	The total number of calls placed during the day
Day_Charge	The billed cost of daytime calls
Eve_Mins, Eve_Calls, Eve_Charge	The billed cost for evening calls
Night_Mins, Night_Calls, Night_Charge	The billed cost for nighttime calls
Intl_Mins, Intl_Calls, Intl_Charge	The billed cost for international calls
CustServ_Calls	The number of calls placed to customer service

us-east-1.console.aws.amazon.com/sagemaker/home?region=us-east-1#/canvas-landing

Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 6838-5306-5264

CloudFormation EC2 RDS S3 Amazon SageMaker Amazon Bedrock AWS DeepRacer

Amazon SageMaker

Getting started Studio Studio Lab Canvas RStudio TensorBoard Profiler

Admin configurations Domains Role manager Images Lifecycle configurations

SageMaker dashboard Search

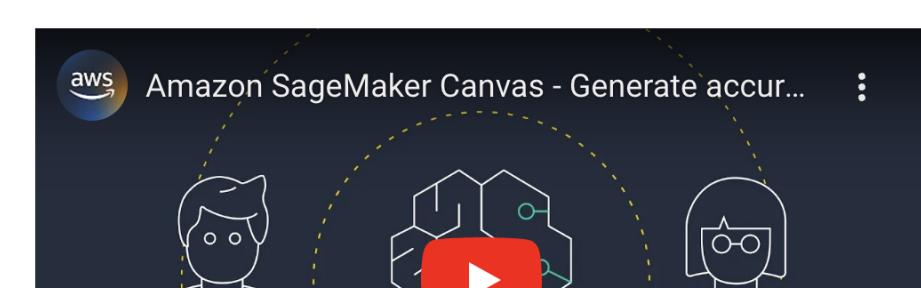
JumpStart Foundation models

Amazon SageMaker

SageMaker Canvas

Generate accurate machine learning predictions — no code required

How it works



Get Started

Select user profile Open Canvas

Pricing (US)

AWS Free Tier

If you are new to SageMaker you are eligible for the AWS Free Tier which includes up to 10 models with up to 1M cells of data free for the first 2 months.

us-east-1.console.aws.amazon.com/sagemaker/home?region=us-east-1#/canvas-landing

Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 6838-5306-5264

CloudFormation EC2 RDS S3 Amazon SageMaker Amazon Bedrock AWS DeepRacer

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Getting started Studio Studio Lab Canvas RStudio TensorBoard Profiler

▼ Admin configurations Domains Role manager Images Lifecycle configurations

SageMaker dashboard Search

▼ JumpStart Foundation models

SageMaker Canvas

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How it works

Get Started

Select user profile

- 2-data-scientist
- 2-data-scientist
- 1-business-analyst

Pricing (US)

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us-east-1.console.aws.amazon.com/sagemaker/home?region=us-east-1#/canvas-landing

Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 6838-5306-5264

CloudFormation EC2 RDS S3 Amazon SageMaker Amazon Bedrock AWS DeepRacer

Amazon SageMaker

Getting started Studio Studio Lab Canvas RStudio TensorBoard Profiler

Admin configurations Domains Role manager Images Lifecycle configurations

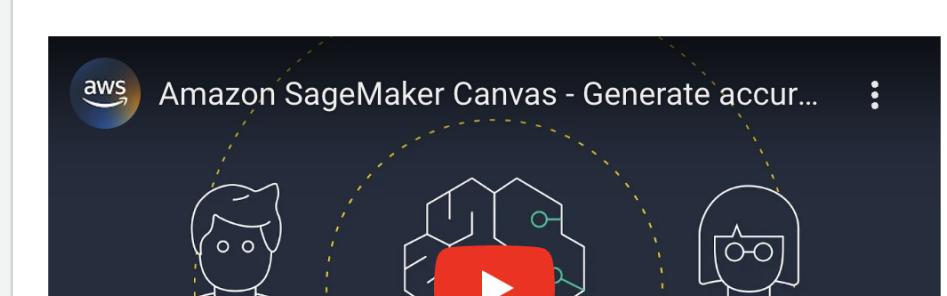
SageMaker dashboard Search

JumpStart Foundation models

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Get Started

Select user profile Open Canvas 

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⚙️ Ready-to-use models

 You must have the necessary permissions to make predictions with Ready-to-use models. Go to the [SageMaker Console](#) to enable permissions for this account if this hasn't been done already. If you don't have access to the [SageMaker Console](#), contact your administrator. [Learn more](#) 

 New!

Accelerate your productivity using generative AI

Content generation, extraction, summarization, and many more tasks are easier to perform using foundation models from Amazon Bedrock and publicly available models from Amazon SageMaker JumpStart.



Summarize...



Write a blog post...



Explain...



Brainstorm ideas...



List key takeaways...



Improve writing...



Rewrite...



Outline...



Change tone...



Reply to this...



Simplify...



Compare...



Paraphrase...

 Get started now Search use case Last used  Grid List

Can't find the right model? [Create a custom model](#)

Generative AI using foundation models

Our content generation models can help you craft engaging narratives, articles, answer questions, and more, tailored to your needs.





New! Amazon SageMaker Canvas supports comprehensive data preparation including a conversational interface for data transformation, Gen AI capabilities to access, evaluate, and fine-tune LLMs, configuration of parameters to build models, and the ability to directly deploy models to real-time endpoints. [Learn more](#)



My models

Search models

+ New model



Grid My models

List



Filter by problem type: Fine-tune foundation model



Last viewed





Create new model



Model name

Model name

Churn

Use only letters, numbers, and underscores up to 32 characters.

Problem type

Select the problem type you want the model to solve.



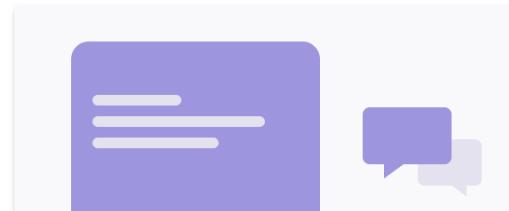
Predictive analysis

Build models using tabular datasets to predict single or multiple categories as well as regression and time-series forecast problems.



Image analysis

Build models using image datasets to predict single or multiple categories for image classification problems.



Text analysis

Build models using tabular datasets to predict single or multiple categories for text classification problems.



Fine-tune foundation model

Customize a foundation model on your data to improve its performance for a specific task or domain.

Cancel

Create

Amazon SageMaker Canvas | Amazon SageMaker Canvas | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

Add version

My models > Churn > Version 1

Select Build Analyze Predict Deploy

Select dataset

You can import a tabular dataset or choose one that has already been imported. Your dataset must contain at least one input column and a target column.

+ Create dataset Join

Search datasets in Canvas

All Joined

Name	Columns	Rows	Cells	Created	Status

Red arrow pointing to the '+ Create dataset' button.

[Select](#)[Build](#)[Analyze](#)[Predict](#)[Deploy](#)

Select dataset

[+ Create dataset](#)[Join](#)

You can import a tabular dataset or choose one that has already been imported. Your dataset must contain at least one input column and a target column.

 Search datasets in Canvas

Create a tabular dataset



Dataset name

CustomerData

Use only letters, numbers, spaces, dashes, colons, and underscores up to 64 characters.

[Cancel](#)[Create](#)

Amazon SageMaker Canvas | Amazon SageMaker Canvas | Amazon SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

New Chrome available

CustomerData: Create Tabular dataset

Data Source: Local upload

Upload files to import

Drag a CSV or Parquet file here

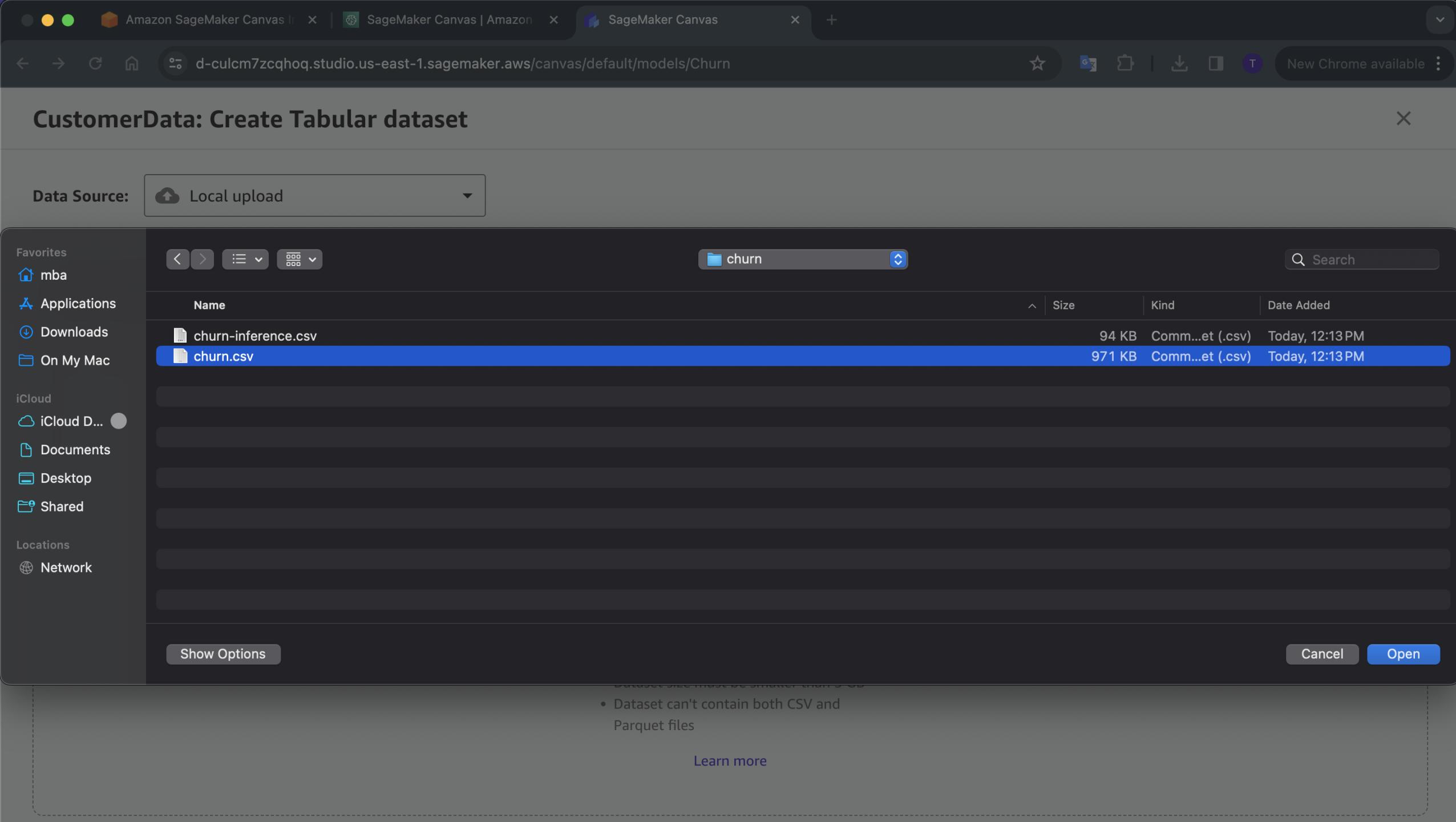
or

Select files from your computer

- Dataset size must be smaller than 5 GB
- Dataset can't contain both CSV and Parquet files

Learn more





Amazon SageMaker Canvas | Amazon SageMaker Canvas | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

CustomerData: Create Tabular dataset

Data Source: Local upload

Upload files to import

Drag a CSV or Parquet file here

or

Select files from your computer

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- Dataset can't contain both CSV and Parquet files

Learn more

1 file ready to import

churn.csv

Delete all

Preview

A screenshot of a web browser window showing the SageMaker Canvas interface for creating a tabular dataset. The title bar shows three tabs: 'Amazon SageMaker Canvas' (active), 'SageMaker Canvas | Amazon', and 'SageMaker Canvas'. The main content area is titled 'CustomerData: Create Tabular dataset'. A dropdown menu 'Data Source:' is set to 'Local upload'. Below it, a section 'Upload files to import' contains a dashed box for dragging files and a purple button 'Select files from your computer'. To the right, a list shows '1 file ready to import': 'churn.csv' with a green checkmark icon. At the bottom right of this list is a 'Delete all' link. A large red arrow points to a blue 'Preview' button at the bottom right of the imported file list.

Amazon SageMaker Canvas | Amazon SageMaker Canvas | Amazon SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

CustomerData: Create Tabular dataset

Data Source: Local upload

Upload files to import

Import preview Previewing first 100 rows

Create dataset

churn.csv

Use first row as header

Delete

State	Account_Length	Area_Code	Phone	Intl_Plan	Vmail_Plan
PA	163	806	403-2562	no	yes
SC	15	836	158-8416	yes	no
MO	131	777	896-6253	no	yes
WY	75	878	817-5729	yes	yes
WY	146	878	450-4942	yes	no

A red arrow points to the "Create dataset" button.

[Select](#)[Build](#)[Analyze](#)[Predict](#)[Deploy](#)

Select dataset

[+ Create dataset](#)[Join](#)

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 Search datasets in Canvas[All](#)[Joined](#)[Name](#)[Columns](#)[Rows](#)[Cells](#)[Created](#)[Status](#)

CustomerData

V1

21

5,000

105,000

01/16/2024 12:19 PM

Ready

[Select dataset](#)

Amazon SageMaker Canvas | Amazon SageMaker Canvas | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

Add version

My models > Churn > Version 1

Select Build Analyze Predict Deploy

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column

Model type

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

To see a recommended model type, specify a value for the target column.

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Manage columns Manage rows Time series View all Data visualizer

Column name	Data type	Feature type	Missing	Mismatched	Unique	Mode
Vmail_Plan	Text	Binary	0.00% (0)	0.00% (0)	2	yes
Vmail_Message	Numeric	-	0.00% (0)	0.00% (0)	14	0
State	Text	-	0.00% (0)	0.00% (0)	51	RI
Phone	Text	-	0.00% (0)	0.00% (0)	4,999	614-5668
Night_Mins	Numeric	-	0.00% (0)	0.00% (0)	5,000	0.01
Night_Charge	Numeric	-	0.00% (0)	0.00% (0)	5,000	0.06

Manage columns



Select

Build

Analyze

Predict

Deploy

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Preview model

CustomerData

Full dataset: 5.0k rows



Manage columns

Manage rows

Time series

View all

Data visualizer



Vmail_Plan	A	⋮	Vmail_Me...	123	⋮	State	A	⋮	Phone	A	⋮	Night_Mins	123	⋮	Night_M...	123	⋮
2 Categories	Binary		0.00	1286.46		PA	4999 Values		403-2562	9.67		0.01	9.67		5.1116239145545554	9.67	
yes	300					SC	158-8416		158-8416			4.065759457683862			7.141039871521733		6.436187619334115
no	0					MO	896-6253		896-6253			5.3632346813680325			5.1424508654321		
yes	300																

SageMaker Canvas | Amazon | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

My models > Churn > Version 1

Target column

To see a recommended model type, specify a value for the target column.

Quick build

Preview model

CustomerData
Visualization sample: 100 rows

Manage columns

Manage rows

Time series

View all

Data visualizer

Visualizations

Analytics

Scatter plot

Bar chart

Box plot

Drop column here

Drag columns into the axis

Drop column here

State

Account...

Area_Co...

Phone

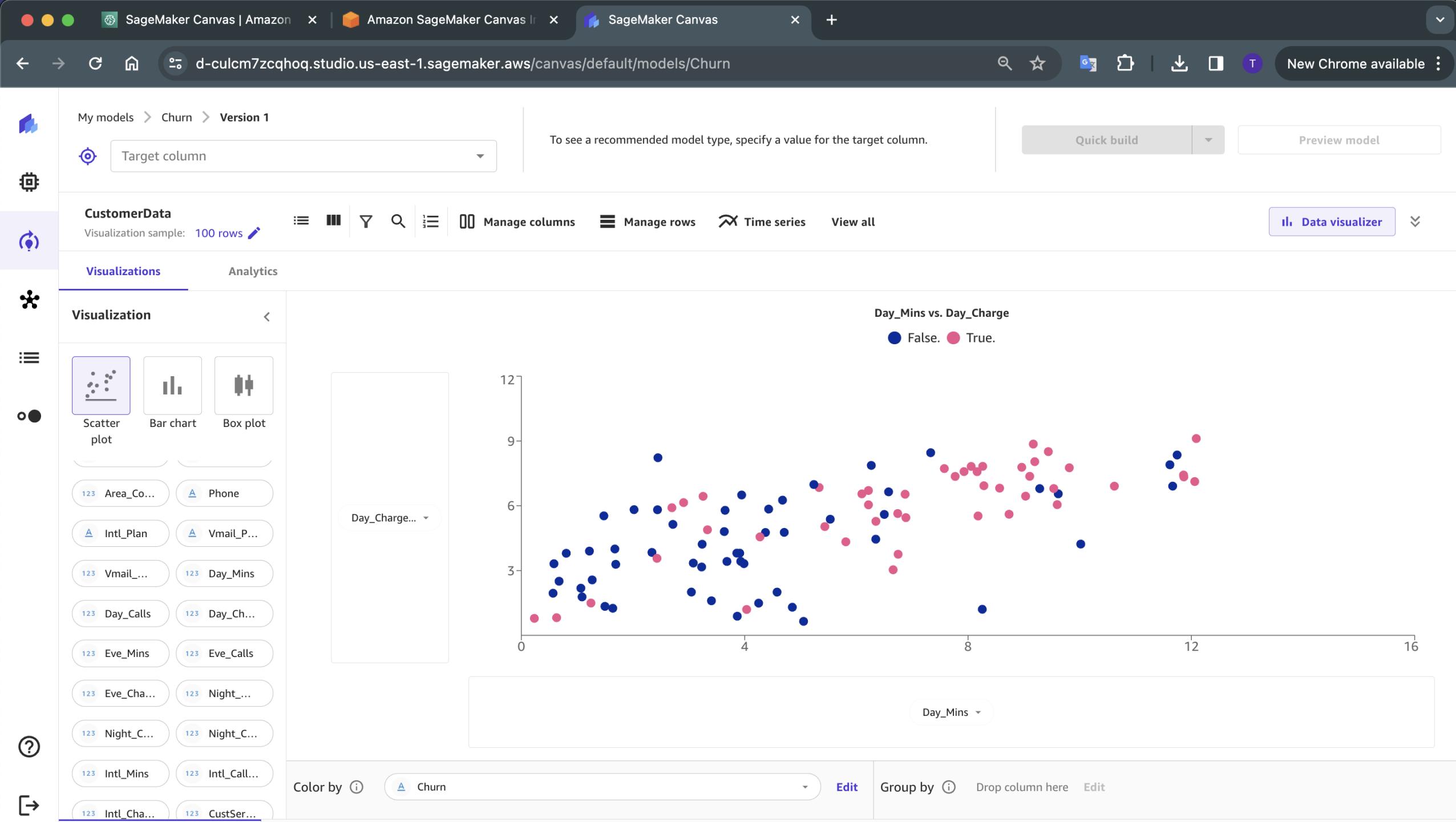
Intl_Plan

Vmail_P...

Vmail...

Day_Mins

Scatterplot



SageMaker Canvas | Amazon X | SageMaker Canvas X

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

My models > Churn > Version 1

Target column

To see a recommended model type, specify a value for the target column.

Quick build

Preview model

CustomerData
Visualization sample: 100 rows

Manage columns

Manage rows

Time series

View all

Data visualizer

Visualizations

Analytics

Scatter plot

Bar chart

Box plot

Area_Co...

Phone

Intl_Plan

Vmail_P...

Vmail_...

Day_Mins

Day_Calls

Day_Ch...

Eve_Mins

Eve_Calls

Eve_Ch...

Night_...

Night_C...

Night_C...

Intl_Mins

Intl_Call...

Intl_Ch...

CustSer...

Drop column here

Drag columns into the axis

Drop column here

 Target column

To see a recommended model type, specify a value for the target column.

Quick build

Preview model

CustomerData

Visualization sample: 100 rows  Manage columns Manage rows Time series

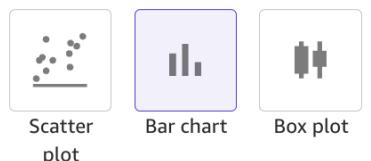
View all

 Data visualizer

Visualizations

Analytics

Visualization

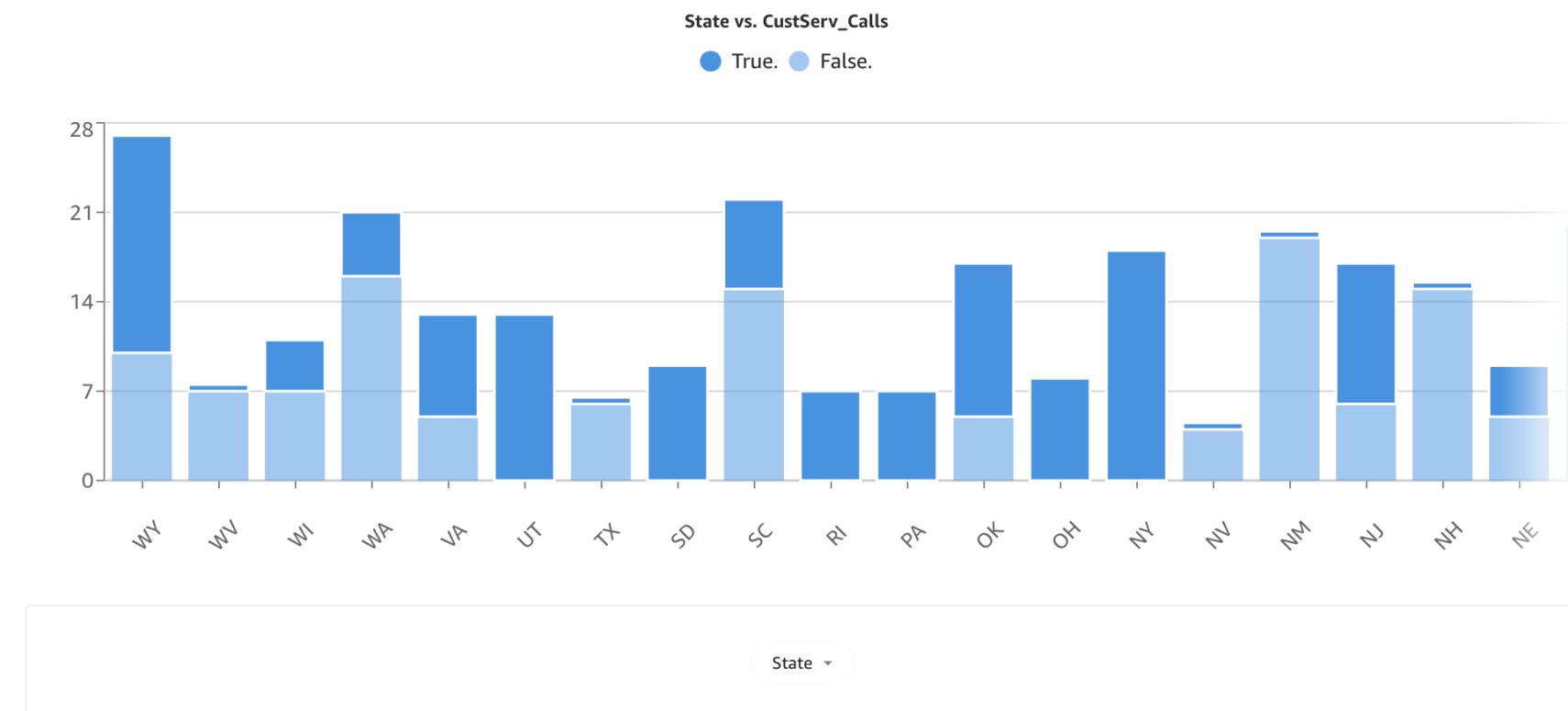


Columns

-  State 
-  Account...
- 
-  Phone
- 
-  Vmail_P...
- 
-  Vmail_...
- 
-  Day_Mins
- 
-  Day_Calls
- 
-  Eve_Mins
- 

 Bar chart

+

Group by 

Drop column here

Edit

Stack by  Churn

Edit

Target column

To see a recommended model type, specify a value for the target column.

Quick build

Preview model

CustomerData

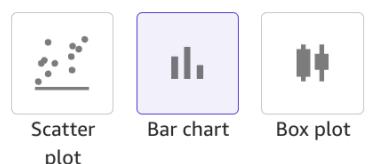
Visualization sample: 100 rows



Visualizations

Analytics

Visualization



Columns

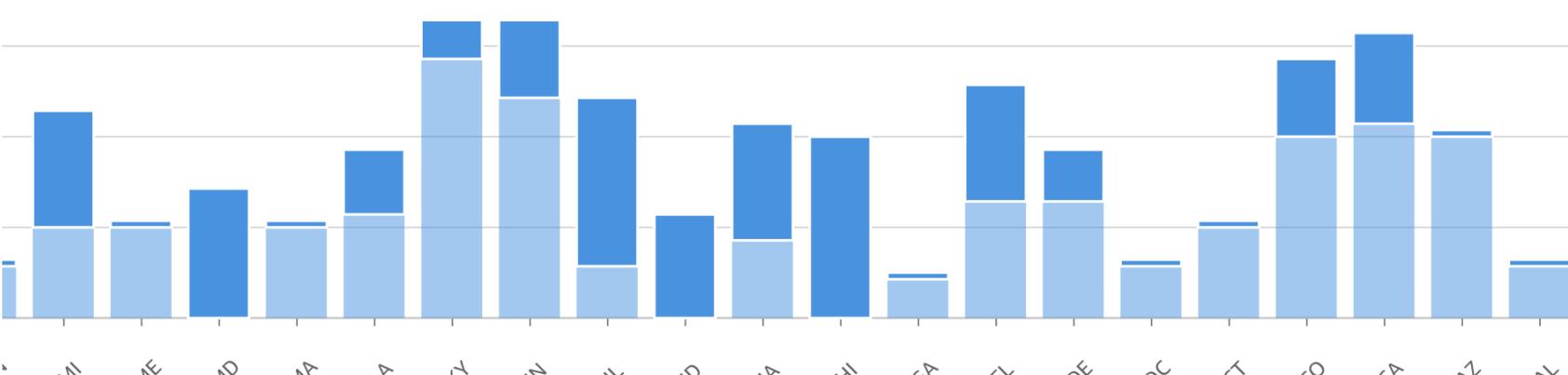
- State
- Account...
- Area_Co...
- Phone
- Intl_Plan
- Vmail_P...
- Vmail_...
- Day_Mins
- Day_Calls
- Day_Ch...
- Eve_Mins
- Eve_Calls
- Eve_Cha...
- Night_...
- Night_C...
- Night_C...

Bar chart

Group by ? Drop column here Edit

State vs. CustServ_Calls

True. False.



State ▼

Stack by ? Churn

Edit

Target column

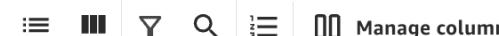
To see a recommended model type, specify a value for the target column.

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows



Manage columns

Manage rows



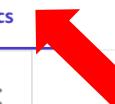
Time series

View all

Data visualizer

Visualizations

Analytics



Analytics



Correlation matrix

Columns

All

Search columns

Account_Length

123

Area_Code

123

Intl_Plan

A

Vmail_Plan

A

Vmail_Message

123

Day_Mins

123

Day_Calls

123

Day_Charge

123

Correlation matrix

+

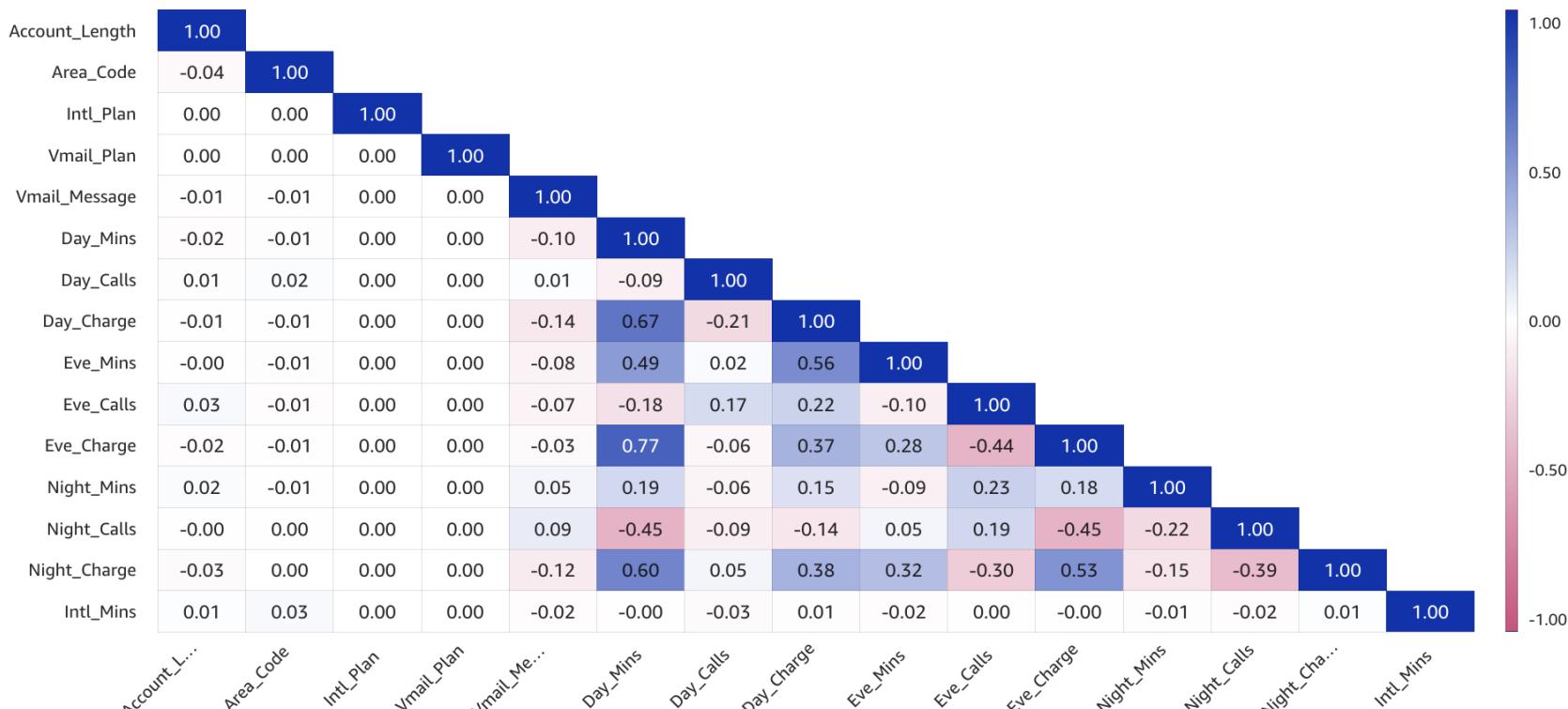
Total columns: 21

Total rows: 5,000

Total cells: 105,000

Show dropped columns

Correlation Matrix



Filter correlations

Min
-1.00

Max
1.00

Correlation type

Spearman & MI

Visualize by

Numeric

Size

Color selection



Target column

To see a recommended model type, specify a value for the target column.

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Manage columns

Manage rows

Time series

View all

Data visualizer

Visualizations

Analytics

Analytics



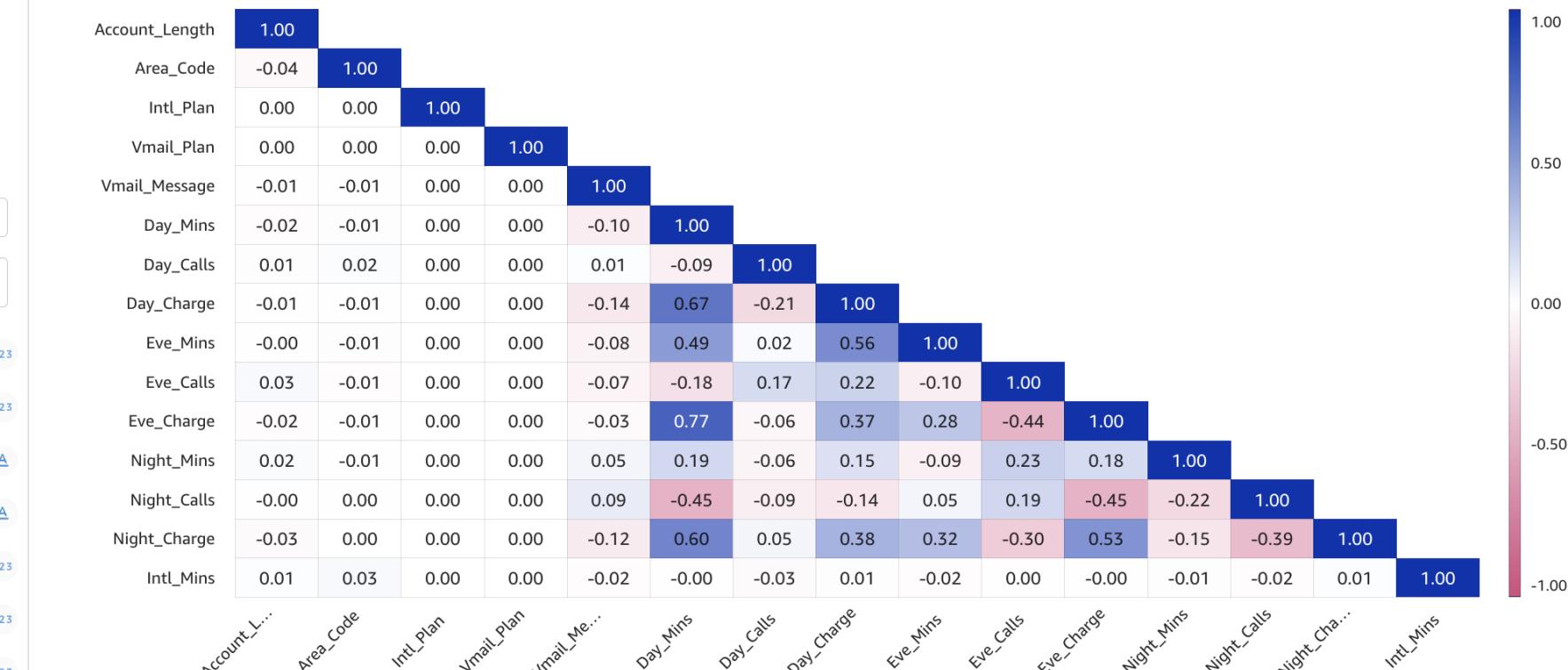
Correlation matrix

Columns

All

Search columns

Account_Length



Correlation matrix

+

Total columns: 21

Total rows: 5,000

Total cells: 105,000

Show dropped columns

Filter correlations

Min
-1.00

Max
1.00

Correlation type

Spearman & MI

Visualize by

Numeric

Size

Color selection



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d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

Add version

New Chrome available

My models > Churn > Version 1

Select Build Analyze Predict Deploy

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column



Model type

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

To see a recommended model type, specify a value for the target column.

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Manage columns Manage rows Time series View all Data visualizer

Column name	Data type	Feature type	Missing	Mismatched	Unique	Mode
Vmail_Plan	Text	Binary	0.00% (0)	0.00% (0)	2	yes
Vmail_Message	Numeric	-	0.00% (0)	0.00% (0)	14	0
State	Text	-	0.00% (0)	0.00% (0)	51	RI
Phone	Text	-	0.00% (0)	0.00% (0)	4,999	614-5668
Night_Mins	Numeric	-	0.00% (0)	0.00% (0)	5,000	0.01
Night_Charge	Numeric	-	0.00% (0)	0.00% (0)	5,000	0.06

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d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

Add version

New Chrome available

My models > Churn > Version 1

Select Build Analyze Predict Deploy

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column: Churn

Value distribution:

- False: [blue bar]
- True: [blue bar]

Model type

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

2 category prediction

Your model classifies Churn into two categories.

Configure model

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Manage columns Manage rows Time series View all Data visualizer

Column name	Data type	Feature type	Missing	Mismatched	Unique	Mode
Vmail_Plan	Text	Binary	0.00% (0)	0.00% (0)	2	yes
Vmail_Message	Numeric	-	0.00% (0)	0.00% (0)	14	0
State	Text	-	0.00% (0)	0.00% (0)	51	RI
Phone	Text	-	0.00% (0)	0.00% (0)	4,999	614-5668
Night_Mins	Numeric	-	0.00% (0)	0.00% (0)	5,000	0.01

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d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

Add version

New Chrome available

My models > Churn > Version 1

Select Build Analyze Predict Deploy

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column: Churn

Value distribution: False. (blue bar), True. (blue bar)

Model type

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

2 category prediction

Your model classifies Churn into two categories.

Configure model

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Manage columns Manage rows Time series View all Data visualizer

Column name	Data type	Feature type	Missing	Mismatched	Unique	Mode
Vmail_Plan	Text	Binary	0.00% (0)	0.00% (0)	2	yes
Vmail_Message	Numeric	-	0.00% (0)	0.00% (0)	14	0
State	Text	-	0.00% (0)	0.00% (0)	51	RI
Phone	Text	-	0.00% (0)	0.00% (0)	4,999	614-5668
Night_Mins	Numeric	-	0.00% (0)	0.00% (0)	5,000	0.01



My models > Churn > Version 1

[+ Add version](#)

Select

Build

Analyze

Predict

Deploy

No issues have been found in your dataset X

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column
 Churn

Value distribution

**Model type**

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

2 category prediction

Your model classifies Churn into two categories.

[Configure model](#)

[Quick build](#)[Preview model](#)**CustomerData**

Full dataset: 5.0k rows

Column name	Data type	Feature type	Missing	Mismatched
-------------	-----------	--------------	---------	------------

 Column name ↓Data type [i](#)Feature type [i](#)Missing [i](#)Mismatched [i](#) Vmail_Plan

Text

Binary

0.00% (0)

0.00% (0)

 Vmail_Message

Numeric

-

0.00% (0)

0.00% (0)

 State

Text

-

0.00% (0)

0.00% (0)

 Phone

Text

-

0.00% (0)

0.00% (0)

Preview modelEstimated accuracy [i](#)**95.6%**

The model predicts the correct target (Churn) 95.6% of the time.

Column impact [i](#)

My models > Churn > Version 1

Add version



Select

Build

Analyze

Predict

Deploy

No issues have been found in your dataset

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column
 Churn

Value distribution

False.

True.

Model type

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

2 category prediction

Your model classifies Churn into two categories.

[Configure model](#)[Quick build](#)[Preview model](#)

CustomerData

Full dataset: 5.0k rows

Column name	Data type	Feature type	Missing	Mismatched
-------------	-----------	--------------	---------	------------

Column name	Data type	Feature type	Missing	Mismatched
Vmail_Plan	Text	Binary	0.00% (0)	0.00% (0)
Vmail_Message	Numeric	-	0.00% (0)	0.00% (0)
State	Text	-	0.00% (0)	0.00% (0)
Phone	Text	-	0.00% (0)	0.00% (0)

Data visualizer	
-----------------	--

Eve_Calls

State

Intl_Plan

Phone

0.121

0.076

0.041

0.02



My models > Churn > Version 1

[+ Add version](#)

Select

Build

Analyze

Predict

Deploy

i You've made 2 changes. Revalidate your dataset before building a model.

[Re-check dataset issues](#)**Select a column to predict**

Choose the target column. The model that you build predicts values for the column that you select.

Target column

Value distribution

**Model type**

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

i 2 category prediction

Your model classifies Churn into two categories.

[Configure model](#)[Quick build](#)[Preview model](#)**CustomerData**

Full dataset: 5.0k rows

[Data visualizer](#)

<input type="checkbox"/>	Column name ↓	Data type	Feature type	Missing	Mismatched
<input checked="" type="checkbox"/>	Vmail_Plan	A Text	Binary	0.00% (0)	0.00% (0)
<input checked="" type="checkbox"/>	Vmail_Message	123 Numeric	-	0.00% (0)	0.00% (0)
<input type="checkbox"/>	State	A Text	-	0.00% (0)	0.00% (0)
<input type="checkbox"/>	Phone	A Text	-	0.00% (0)	0.00% (0)

Model recipe[+ Add transform](#)

1 Drop column State

2 Drop column Phone



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You've made 2 changes. Revalidate your dataset before building a model.

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Vmail_Plan: 2 Categories, Binary, yes (300), no (0)

Vmail_Message: 123 Values, 0.00 to 1286.46

State: 51 Values, PA, SC, MO, WY, VA, IN, LA

Phone: 4999 Values, 403-2562 to 871-3612

Churn: 0.01

View all

Add transform

- Manage columns
- Change data type
- Custom formula
- Replace missing values
- Replace outlier values
- Manage rows
- Drop duplicate rows
- Drop rows by formula

A red arrow points to the "View all" button in the top right corner of the data visualization table.

	Vmail_Plan	Vmail_Message	State	Phone	Churn
yes	300	PA	403-2562	4.06%	
no	0	SC	158-8416	7.14%	
yes	300	MO	896-6253	5.36%	
yes	700	WY	817-5729	3.77%	
no	0	WY	450-4942	3.75%	
no	0	VA	454-9110	2.93%	
no	0	IN	331-5751	2.35%	
no	0	LA	871-3612	0.68%	

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You've made 2 changes. Revalidate your dataset before building a model.

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

	Vmail_Plan	Vmail_Me...	State	Phone	
yes	300	PA	51 Values	4999 Values	0.01
no	0	SC	1286.46	403-2562	4.06!
yes	300	MO	7.14	896-6253	5.36:
yes	700	WY	3.77:	817-5729	2.93:
no	0	WY	3.75:	450-4942	2.35:
no	0	VA	2.93:	454-9110	0.688
no	0	IN	2.35:	331-5751	
no	0	LA		871-3612	

Add transform

Manage columns

Change data type

Custom formula

Replace missing values

Replace outlier values

Manage rows

Drop duplicate rows

Drop rows by formula

A red arrow points to the "Custom formula" section.

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catalog.us-east-1.prod.workshops.aws/workshops/80ba0ea5-7cf9-4b8c-9d3f-1cd988b6c071/en-US/1-use-cases/1-mark... ↴ ⭐ ↵ ↷ ↸ T New Chrome available :

aws workshop studio

Amazon SageMaker Canvas Immersion Day

What is Amazon SageMaker Canvas?

Prerequisites

- AWS Workshop Portal
- Self-Paced Lab

Use case labs

- Lab 1 - Customer Churn (Marketing)
- Lab 2 - Housing Prices (Real Estate)
- Lab 3 - Demand Forecasting (Retail)
- Lab 4 - Loan Default Prediction (Financial Services)
- Lab 5 - Diabetic Patient Readmission Prediction (Healthcare & Life Sciences)
- Lab 6 - Predicting Machine Failure Types (Manufacturing)

Content preferences

Language

unchecking uncheck those features in the Column View.

CustomerData(3)
Full dataset: 5.0k rows

Column name	Data type	Feature type	Missing	Mismatch
Vmail_Plan	Text	Binary	0.00% (0)	0.00% (0)
Vmail_Message	Numeric	-	0.00% (0)	0.00% (0)
State	Text	-	0.00% (0)	0.00% (0)
Phone	Text	-	0.00% (0)	0.00% (0)

Model recipe

1. Drop column State
2. Drop column Phone

Let's perform some additional data transformation as well. For example, we noticed in our previous analysis that charged amount to customers has a direct impact to the churn. Let's therefore create a new column that computes the total charges to our customers by combining the "Charge", "Mins" and "Calls", for "Day", "Eve", "Night" and "Intl". To do so, we will use the **Custom Formulas** in Amazon SageMaker Canvas:

1. Click on the **View all** transformations button
2. Select **Custom Formula**
3. Use the following formula:
`(Day_Calls*Day_Charge*Day_Mins)+(Eve_Calls*Eve_Charge*Eve_Mins)+(Night_Calls*Night_Charge*Night_Mins)+(Intl_Calls*Intl_Charge*Intl_Mins)`
4. Give it a name like *Total_Charges*, then click **Preview**, then **Add**
5. You can verify that the transformation has taken place after clicking Preview by scrolling to the right to find the new column, as well as in the Model Recipe after clicking Add.

Copied!

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You've made 2 changes. Revalidate your dataset before building a model.

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Source

Intl_Charge	Intl_Calls	Intl_Mins	Night_Charge
0.00	0.00	1.65	0.05
13.50	11.40	8.07	9.89
5.673203040696215	6	4.9281602056057885	5.1116239145545554
2.5597491623290343	6	3.221747623188701	6.436187619334115
6.254156588270942	2	7.139023052596313	5.142450865432123
1.0806920414898902	6	2.245779327608127	3.814413422187984
7.134342911307563	4	6.905545285710017	2.7968119977118326
5.13532274057697	4	4.948816088347728	4.817958439785448
1.7847648201298167	4	5.393439248879196	3.8691763484913535

Data visualizer

Σ Custom formula

Use mathematical functions to explore and distribute your data. [Learn more](#)

Formula (Required)

```
(Day_Calls*Day_Charge*Day_Mins)+  
(Eve_Calls*Eve_Charge*Eve_Min)s+  
(Night_Calls*Night_Charge*Night_Mins)+  
(Intl_Calls*Intl_Charge*Intl_Mins )
```

New Column Name (Required)

Write a new name

Enter a column name. The name can have up to 64 characters.

Preview Cancel Add

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You've made 2 changes. Revalidate your dataset before building a model.

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Quick build

Preview model

CustomerData (5.0k rows)

Source

Intl_Charge	Intl_Calls	Intl_Mins	Night_Charge
0.00	0.00	1.65	0.05
13.50	11.40	8.07	9.89
5.673203040696215	6	4.9281602056057885	5.1116239145545554
2.5597491623290343	6	3.221747623188701	6.436187619334115
6.254156588270942	2	7.139023052596313	5.142450865432123
1.0806920414898902	6	2.245779327608127	3.814413422187984
7.134342911307563	4	6.905545285710017	2.7968119977118326
5.13532274057697	4	4.948816088347728	4.817958439785448
1.7847648201298167	4	5.393439248879196	3.8691763484913535

Data visualizer

Custom formula

Use mathematical functions to explore and distribute your data. [Learn more](#)

Formula (Required)

```
(Day_Calls*Day_Charge*Day_Mins)+  
(Eve_Calls*Eve_Charge*Eve_Min)s+  
(Night_Calls*Night_Charge*Night_Mins)+  
(Intl_Calls*Intl_Charge*Intl_Mins )
```

New Column Name (Required)

Total_Charges

Preview Cancel Add

Intl_Charge	Intl_Calls	Intl_Mins	Night_Charge
0.00	0.00	1.65	0.05
13.50	11.40	8.07	9.89
5.673203040696215	6	4.9281602056057885	5.1116239145545554
2.5597491623290343	6	3.221747623188701	6.436187619334115
6.254156588270942	2	7.139023052596313	5.142450865432123
1.0806920414898902	6	2.245779327608127	3.814413422187984
7.134342911307563	4	6.905545285710017	2.7968119977118326
5.13532274057697	4	4.948816088347728	4.817958439785448
1.7847648201298167	4	5.393439248879196	3.8691763484913535

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You've made 3 changes. Revalidate your dataset before building a model.

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Preview

Day_Mins	Total_Charge	Vmail_Plan	Vmail_Message
16.05	26.44	A	1286.46
8.162204021739099	2533.997152374561	yes	PA
10.01899266483425	9411.068303566357	no	SC
4.708489916519045	2976.830656293691	yes	MO
1.2687337723540173	6531.147630440587	yes	WY
2.696177237539812	2934.278059802452	no	WY
3.634775967167544	4630.007146771804	no	VA
3.2294202559197576	2814.962566704951	no	IN

Data visualizer

Custom formula

Use mathematical functions to explore and distribute your data. [Learn more](#)

Formula (Required)

Enter a Formula

(Day_Calls*Day_Charge*Day_Mins)+
(Eve_Calls*Eve_Charge*Eve_Min)s+
(Night_Calls*Night_Charge*Night_Mins)+
(Intl_Calls*Intl_Charge*Intl_Mins)

New Column Name (Required)

Write a new name

Total_Charges

Preview

Cancel

Add

Re-check dataset issues

SageMaker Canvas | Amazon | SageMaker Canvas

You've made 3 changes. Revalidate your dataset before building a model.

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Preview

Day_Mins	Total_Charge	Vmail_Plan	Vmail_Message
16.05	26.44	A	1286.46
8.162204021739099	2533.997152374561	yes	PA
10.01899266483425	9411.068303566357	no	SC
4.708489916519045	2976.830656293691	yes	MO
1.2687337723540173	6531.147630440587	yes	WY
2.696177237539812	2934.278059802452	no	WY
3.634775967167544	4630.007146771804	no	VA
3.2294202559197576	2814.962566704951	no	IN

Data visualizer

Custom formula

Use mathematical functions to explore and distribute your data. [Learn more](#)

Formula (Required)

Enter a Formula

(Day_Calls*Day_Charge*Day_Mins)+
(Eve_Calls*Eve_Charge*Eve_Min)s+
(Night_Calls*Night_Charge*Night_Mins)+
(Intl_Calls*Intl_Charge*Intl_Mins)

New Column Name (Required)

Write a new name

Total_Charges

Preview

Add

Cancel

Re-check dataset issues

SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas

You've made 3 changes. Revalidate your dataset before building a model.

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Quick build

Preview model

CustomerData

Full dataset: 5.0k rows

Intl_Calls Eve_Mins Eve_Charge

	Intl_Calls	Eve_Mins	Eve_Charge	
6	3.9330349941938634	6.508638877091394	4	8.162
6	2.3250045529370977	9.97259241534841	0	10.0
2	4.53746627560553	4.566714501754875	3	4.708
6	2.5287478822678833	2.3336236298897663	5	1.268
4	6.015337072056723	3.670407748359811	3	2.696
4	6.051944336178219	5.278436964531922	5	3.634
4	2.4401528097922234	0.2645430898924843	8	3.229
5	4.507026828401552	4.473085755958402	0	0.567

Standard build: Choose accuracy over speed. Building usually takes between 2–4 hours.

Quick build: Choose speed over accuracy. Building usually takes 2–15 minutes. You can't share quick build models.

Drop column State

Drop column Phone

Created Total_Charges from (Day_Calls*Day_Charge*Day_Mins)+(Eve_Calls*Eve_Charge*Eve_Mins)+(Night_Calls*Night_Charge*Night_Mins)+(Intl_Calls*Intl_Charge*Intl_Mins)

Red arrow pointing to the "Quick build" button.

SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas

You've made 3 changes. Revalidate your dataset before building a model.

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Standard build

Preview model

CustomerData

Full dataset: 5.0k rows

Intl_Calls Eve_Mins Eve_Charge Eve_Calls

	Intl_Calls	Eve_Mins	Eve_Charge	Eve_Calls	
6	3.9330349941938634	6.508638877091394	4	8.162	
6	2.3250045529370977	9.97259241534841	0	10.0	
2	4.53746627560553	4.566714501754875	3	4.708	
6	2.5287478822678833	2.3336236298897663	5	1.268	
4	6.015337072056723	3.670407748359811	3	2.696	
4	6.051944336178219	5.278436964531922	5	3.634	
4	2.4401528097922234	0.2645430898924843	8	3.229	
5	4.507026828401552	4.473085755958402	0	0.567	

Data visualizer

Model recipe

- 1 Drop column State
- 2 Drop column Phone
- 3 Created Total_Charges from (Day_Calls*Day_Charge*Day_Mins)+(Eve_Calls*Eve_Charge*Eve_Mins)+(Night_Calls*Night_Charge*Night_Mins)+(Intl_Calls*Intl_Charge*Intl_Mins)

Re-check dataset issues

Standard build

Preview model

CustomerData

Full dataset: 5.0k rows

Intl_Calls Eve_Mins Eve_Charge Eve_Calls

	Intl_Calls	Eve_Mins	Eve_Charge	Eve_Calls	
6	3.9330349941938634	6.508638877091394	4	8.162	
6	2.3250045529370977	9.97259241534841	0	10.0	
2	4.53746627560553	4.566714501754875	3	4.708	
6	2.5287478822678833	2.3336236298897663	5	1.268	
4	6.015337072056723	3.670407748359811	3	2.696	
4	6.051944336178219	5.278436964531922	5	3.634	
4	2.4401528097922234	0.2645430898924843	8	3.229	
5	4.507026828401552	4.473085755958402	0	0.567	

Data visualizer

Model recipe

- 1 Drop column State
- 2 Drop column Phone
- 3 Created Total_Charges from (Day_Calls*Day_Charge*Day_Mins)+(Eve_Calls*Eve_Charge*Eve_Mins)+(Night_Calls*Night_Charge*Night_Mins)+(Intl_Calls*Intl_Charge*Intl_Mins)

Re-check dataset issues

Standard build

Preview model

 You've made 3 changes. Revalidate your dataset before building a model.

Re-check dataset issues

My models > Churn > Version 1

Target column
 Churn

 2 category prediction

Configure model

Standard build ▾

Preview model

CustomerData

Full dataset: 5.0k rows 



View all

 Data visualizer



 Model recipe

 Add transform

 Drop column State

 Drop column Phone

 Created Total_Charges from
(Day_Calls*Day_Charge*Day_Mins)+
(Eve_Calls*Eve_Charge*Eve_Mins)+
(Night_Calls*Night_Charge*Night_Mi-
ns)+
(Intl_Calls*Intl_Charge*Intl_Mins)

Revalidate dataset issues

You can revalidate for dataset issues to ensure that your changes have resolved all of the issues with your dataset. If you haven't successfully resolved all of the issues, the build will fail.

 Start quick build

 Revalidate data



SageMaker Canvas | Amazon X | SageMaker Canvas X | SageMaker Canvas X +

Back Forward Home Refresh Address: d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn Star Print New Chrome available :

No issues have been found in your dataset

My models > Churn > Version 1

Target column: Churn

2 category prediction

Configure model

Standard build ▾

Preview model

CustomerData

Full dataset: 5.0k rows

Data visualizer

	Intl_Calls	Eve_Mins	Eve_Charge	Eve_Calls	
6	3.9330349941938634	6.508638877091394	4	8.162	
6	2.3250045529370977	9.97259241534841	0	10.0	
2	4.53746627560553	4.566714501754875	3	4.708	
6	2.5287478822678833	2.3336236298897663	5	1.268	
4	6.015337072056723	3.670407748359811	3	2.696	
4	6.051944336178219	5.278436964531922	5	3.634	
4	2.4401528097922234	0.2645430898924843	8	3.229	
5	4.507026828401552	4.473085755958402	0	0.567	

Model recipe

- + Add transform
- 1 Drop column State
- 2 Drop column Phone
- 3 Created Total_Charges from (Day_Calls*Day_Charge*Day_Mins)+(Eve_Calls*Eve_Charge*Eve_Mins)+(Night_Calls*Night_Charge*Night_Mins)+(Intl_Calls*Intl_Charge*Intl_Mins)

SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

Add version

New Chrome available

My models > Churn > Version 1

Select Build Analyze Predict Deploy

Model overview

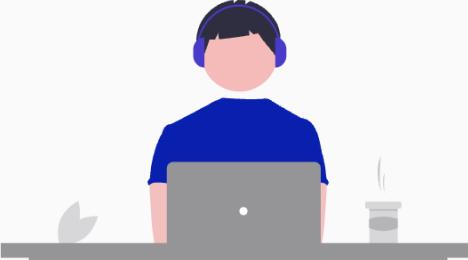
Your model is being created. Standard build usually takes between 2–4 hours. You can now leave this view.

Time elapsed: 3 sec

Expected build time: 45 min

Build type: Standard build

Detailed progress: Training models



SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL S | +

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/group/Churn

My models > Churn

Add version Share

Versions

Select a version to view details

Show advanced metrics

Version	Status	Created	Dataset	Accuracy	Shared	Model Registry
v1	Ready	01/16/2024 12:17 PM	Customer...	96.803%	--	Not Registered ⓘ

A red arrow points to the 'v1' button in the first row of the table.

Select

Build

Analyze

Predict

Deploy

Model status

Accuracy ⓘ

F1 ⓘ Optimization metric

96.803% 0.968

The model predicts the correct Churn 96.803% of the time. ⓘ

[Predict](#)[Deploy](#)[Overview](#)[Scoring](#)[Advanced metrics](#)[Model leaderboard](#)

Column impact ⓘ

 Search columns...

1 Night_Calls

13.489%

2 Eve_Mins

9.538%

3 Day_Mins

9.261%

4 CustServ_Calls

8.767%

5 Eve Charge

Impact on prediction

False. ▾

5.26...

True. -2.80...

0.19...

-0.19...

-0.59...

-0.99...

-1.39...

-1.79...

-2.19...

-2.59...

-2.99...

-3.39...

-3.79...

-4.19...

-4.59...

-4.99...

-5.39...

-5.79...

-6.19...

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-7.39...

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-10.19...

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-96.19...

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-97.39...

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-98.19...

-98.59...

-98.99...

-99.39...

-99.79...

-100.19...

-100.59...

-100.99...

-101.39...

-101.79...

-102.19...

-102.59...

-102.99...

-103.39...

-103.79...

-104.19...

-104.59...

-104.99...

-105.39...

-105.79...

-106.19...

Select

Build

Analyze

Predict

Deploy

Model status

Accuracy ⓘ

F1 ⓘ Optimization metric

96.803% 0.968

The model predicts the correct Churn 96.803% of the time. ⓘ

[Predict](#)[Deploy](#)

Overview

Scoring

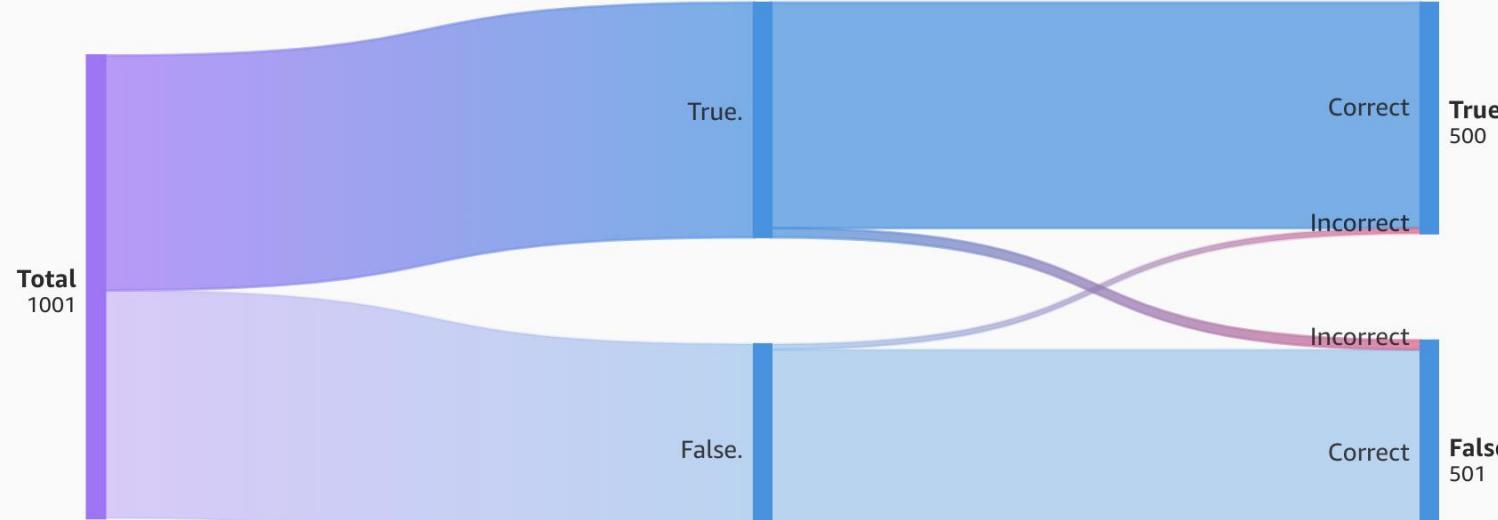
Advanced metrics

[Model leaderboard](#)

All predictions

Predicted

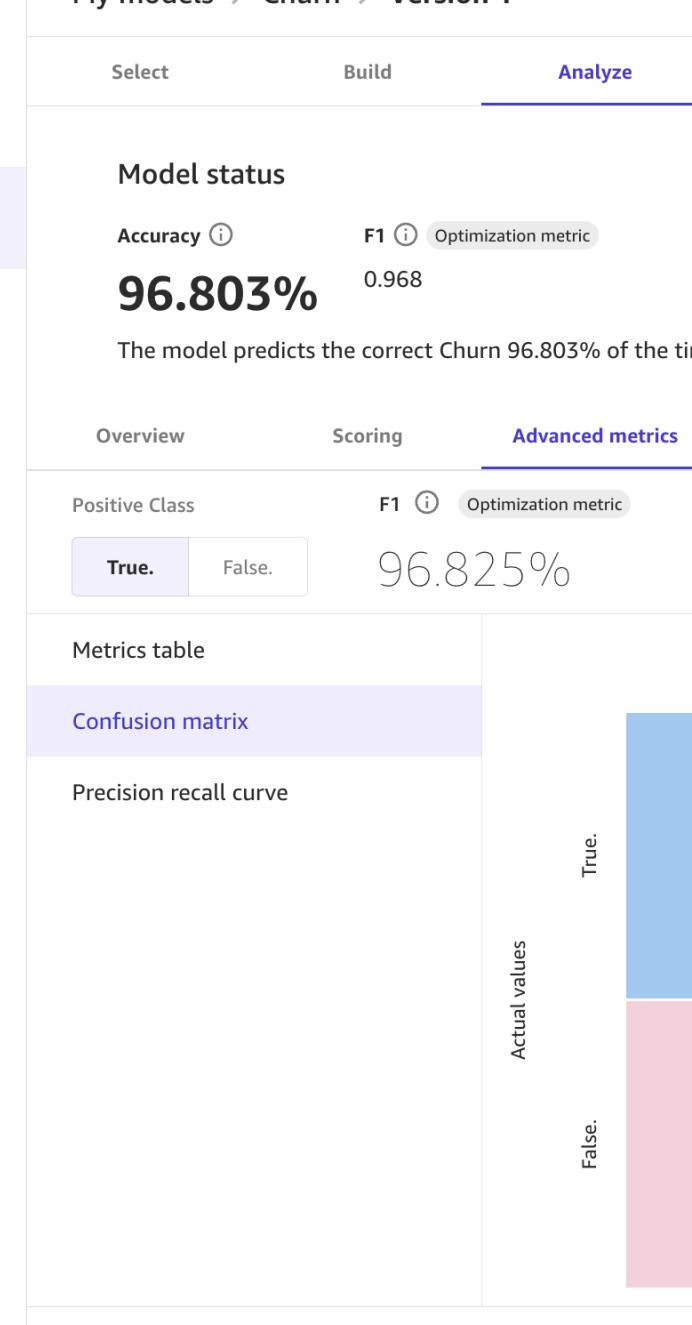
Actual



Model accuracy insights

If the model predicts **True.**, it is correct **96.063% of the time.** ⓘ

For the values that are **True.** in the dataset, the model predicted **97.6%** of them to be **True..** ⓘ



Select Build **Analyze** Predict Deploy

Model status

Accuracy ⓘ F1 ⓘ Optimization metric
96.803% 0.968

The model predicts the correct Churn 96.803% of the time. ⓘ

Predict **Deploy**

Overview Scoring Advanced metrics Advanced metrics Model leaderboard ☰

Positive Class	F1 ⓘ Optimization metric	Accuracy ⓘ	Precision ⓘ	Recall ⓘ	AUC ⓘ
True.	96.825%	96.803%	96.063%	97.6%	0.993
False.					

Metrics table

Confusion matrix

Precision recall curve

Actual values

		Predicted values	
		True.	False.
Actual values	True.	True positive (TP) 488 48.8% of predicted results	False negative (FN) 12 1.2% of predicted results
	False.	False positive (FP) 20 2.0% of predicted results	True negative (TN) 481 48.1% of predicted results

CustomerData Total columns: 20 Total rows: 5,000 Total cells: 100,000 Churn 2 category prediction

Predict

Select

Build

Analyze

Predict

Deploy

Model status

Accuracy

F1 Optimization metric

96.803%

0.968

The model predicts the correct Churn 96.803% of the time.

Predict**Deploy**

Overview

Scoring

Advanced metrics

Model leaderboard

Positive Class

F1 Optimization metric

True.

False.

96.825%

Accuracy

96.803%

Precision

96.063%

Recall

97.6%

AUC

0.993

Metrics table

Confusion matrix

Precision recall curve

		Predicted values	
		True.	False.
Actual values	True.	True positive (TP) 488 48.8% of predicted results	False negative (FN) 12 1.2% of predicted results
	False.	False positive (FP) 20 2.0% of predicted results	True negative (TN) 481 48.1% of predicted results

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d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

My models > Churn > Version 1

Add version

Model leaderboard

Search leaderboard

Model name ↓	F1 Optimization	Accuracy	AUC	Balanced Accuracy	Precision	Recall	Log Loss	Inference latency (seconds)	
WeightedEnsemble-L2-FULL-t3	Default model	96.825%	96.803%	0.993	96.804%	96.063%	97.600%	0.099	0.109
WeightedEnsemble-L2-FULL-t9		93.148%	93.107%	0.977	93.108%	92.505%	93.800%	0.218	0.193
WeightedEnsemble-L2-FULL-t8		96.825%	96.803%	0.993	96.804%	96.063%	97.600%	0.099	0.120
WeightedEnsemble-L2-FULL-t7		94.985%	94.905%	0.985	94.907%	93.424%	96.600%	0.158	0.153
WeightedEnsemble-L2-FULL-t6		94.685%	94.605%	0.986	94.607%	93.217%	96.200%	0.149	0.091
WeightedEnsemble-L2-FULL-t5		94.685%	94.605%	0.986	94.607%	93.217%	96.200%	0.149	0.090
WeightedEnsemble-L2-FULL-t4		96.825%	96.803%	0.993	96.804%	96.063%	97.600%	0.099	0.109
WeightedEnsemble-L2-FULL-t2		94.985%	94.905%	0.985	94.907%	93.424%	96.600%	0.158	0.145
WeightedEnsemble-L2-FULL-t1		96.825%	96.803%	0.993	96.804%	96.063%	97.600%	0.099	0.132
NeuralNetFastAI-BAG-L1-FULL-t10		96.729%	96.703%	0.994	96.704%	95.874%	97.600%	0.095	0.102

My models > Churn > Version 1

[+ Add version](#)

Select

Build

Analyze

Predict

Deploy

Predict target values

Batch prediction

Single prediction

Modify values to predict Churn in real time.

Filter columns

Column	Feature importance	Value
State	0%	RI
Account_Length	1.499%	169
Area_Code	0.058%	777
Phone	0%	614-5668
Intl_Plan	0.444%	no
Vmail_Plan	0.605%	yes
Vmail_Message	0.767%	0

Churn Prediction

[Copy](#)**False.**

Average prediction

False.

99.984%

True.

0.016%

Select

Build

Analyze

Predict

Deploy

Predict target values

Batch prediction

Single prediction

Modify values to predict Churn in real time.

Filter columns

Column	Feature importance	Value	🕒
State	0%	RI	
Account_Length	1.499%	169	
Area_Code	0.058%	777	
Phone	0%	614-5668	
Intl_Plan	0.444%	yes	✖️ ⏪
Vmail_Plan	0.605%	yes	Clear
Vmail_Message	0.767%	0	

Churn Prediction

[Copy](#)

You made 1 change to the values. Update for a new prediction and feature importance metrics.

[Update](#)

False.

Average prediction

False.

99.984%

[Download prediction](#)

Select

Build

Analyze

Predict

Deploy

Predict target values

Batch prediction

Single prediction

Modify values to predict Churn in real time.

Filter columns

Column	Feature importance	Value	🕒
State	0%	RI	
Account_Length	1.499%	169	
Area_Code	0.058%	777	
Phone	0%	614-5668	
Intl_Plan	0.444%	yes	🕒
Vmail_Plan	0.605%	yes	
Vmail_Message	0.767%	0	

Churn Prediction

[Copy](#)

You made 1 change to the values. Update for a new prediction and feature importance metrics.

[Update](#)**False.**

Average prediction

False.

99.984%

[Download prediction](#)

Select

Build

Analyze

Predict

Deploy

Predict target values

Batch prediction

Single prediction

Modify values to predict Churn in real time.

Filter columns

Column	Feature importance	Value	Churn Prediction	
State	0%	RI	False.	Copy
Account_Length	0.553%	169		
Area_Code	0.115%	777		
Phone	0%	614-5668		
Intl_Plan	0.559%	yes		
Vmail_Plan	0.958%	yes		
Vmail_Message	0.082%	0		

 New prediction
 Average prediction

False. 99.982%

True. 0.018%

Download prediction

Select dataset for predictions



To make predictions on a dataset, select it or import it. The dataset that you select must have the same number of feature columns as the training dataset. [?](#)

[+ Create dataset](#)

Search datasets in Canvas

Name

Columns

Rows

Cells

Created

Status

CustomerData

V1

FinancialData-For-LLM-Finetuning

V1

canvas-sample-databricks-dolly-15k.csv

V1

canvas-sample-housing.csv

V1

canvas-sample-product-descriptions.csv

V1

canvas-sample-loans-part-1.csv

V1

19

1,000

19,000

10/04/2023 9:21 AM

Incompatible [?](#)

canvas-sample-retail-electronics-fore...

V1

6

40,500

243,000

10/04/2023 9:21 AM

Incompatible [?](#)

canvas-sample-maintenance.csv

V1

9

1,000

9,000

10/04/2023 9:21 AM

Incompatible [?](#)

canvas-sample-shipping-logs.csv

V1

12

1,000

12,000

10/04/2023 9:21 AM

Incompatible [?](#)

Create a tabular dataset



Dataset name

churn-inference-20240116

Use only letters, numbers, spaces, dashes, colons, and underscores up to 64 characters.

[Cancel](#)

[Create](#)

[Close](#)

[Generate predictions](#)

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← → ⌂ ⌄ d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

☆ ⌂ ⌄ ⌅ T New Chrome available :

churn-inferenc... : Create Tabular dataset

Data Source: Local upload ▾

Upload files to import

Drag a CSV or Parquet file here

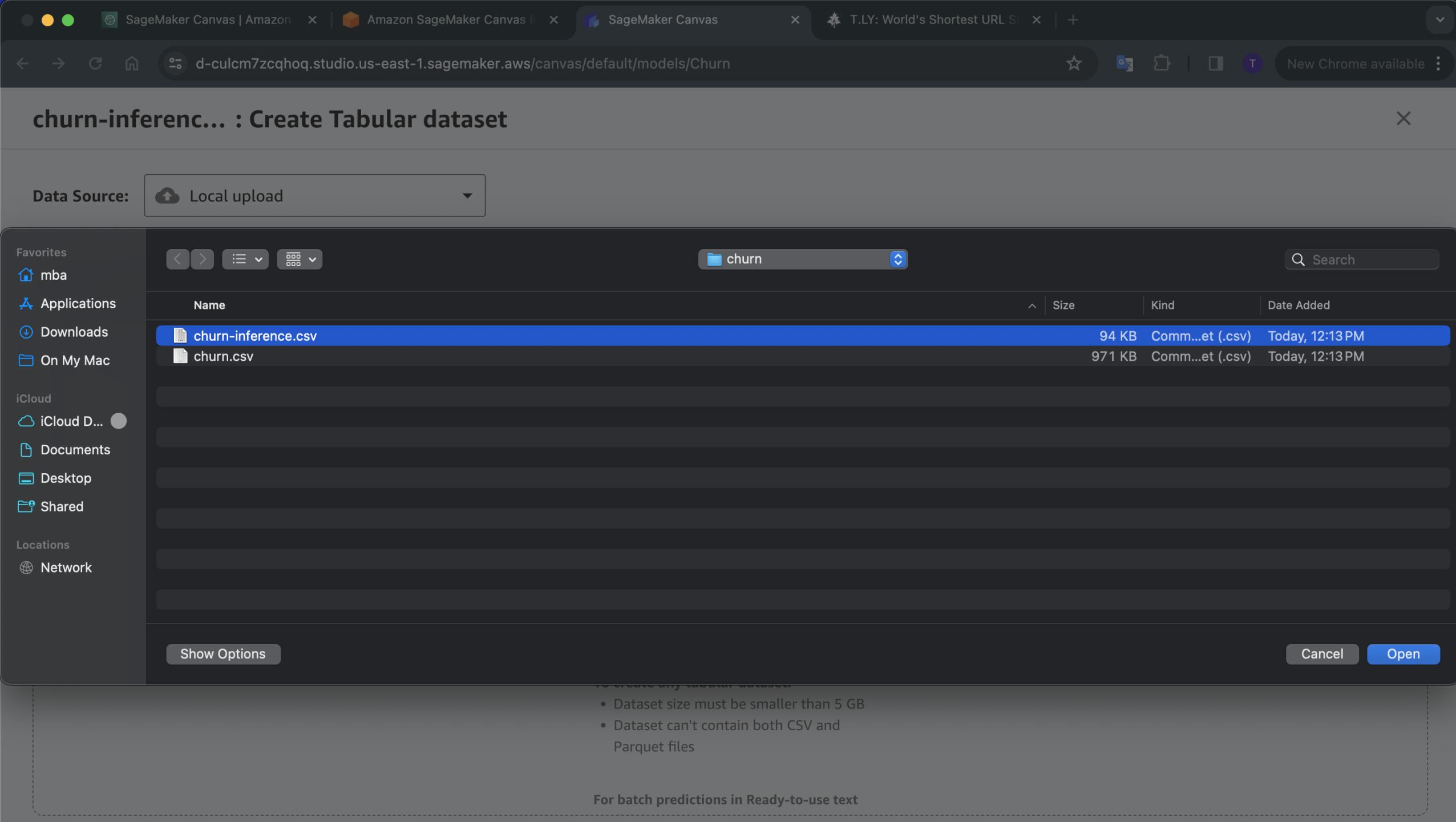
or

Select files from your computer

To create any tabular dataset:

- Dataset size must be smaller than 5 GB
- Dataset can't contain both CSV and Parquet files

For batch predictions in Ready-to-use text



SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL | +

← → ⌂ ⌂ d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn ☆ ⌂ ⌂ ⌂ ⌂ T New Chrome available :

churn-inference... : Create Tabular dataset

Data Source: Local upload

Upload files to import

Drag a CSV or Parquet file here

or

Select files from your computer

To create any tabular dataset:

- Dataset size must be smaller than 5 GB
- Dataset can't contain both CSV and Parquet files

For batch predictions in Ready-to-use text

1 file ready to import

churn-inference.csv

Delete all

Preview

A red arrow points to the 'Preview' button at the bottom right of the interface.

SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL S | +

← → ⌂ ⌂ d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Churn

☆ ⌂ ⌂ ⌂ ⌂ ⌂ ⌂ New Chrome available ⌂

churn-inference... : Create Tabular dataset

Data Source: Local upload

Upload files to import

Import preview Previewing first 100 rows Close preview Create dataset

churn-inference.csv Use first row as header ⓘ Delete

State	Account_Length	Area_Code	Phone	Intl_Plan	Vmail_Plan
MO	176	777	913-2699	no	yes
LA	41	766	667-1912	yes	no
VT	57	868	388-8558	yes	no
IL	108	737	171-7330	yes	no
MI	105	777	239-1413	no	yes



Select dataset for predictions



To make predictions on a dataset, select it or import it. The dataset that you select must have the same number of feature columns as the training dataset. [?](#)

[+ Create dataset](#)

Search datasets in Canvas

Name	Columns	Rows	Cells	Created	Status
churn-inference-20240116	V1	20	500	10,000	01/16/2024 1:47 PM



[Close](#)

[Generate predictions](#)

Select

Build

Analyze

Predict

Deploy

Predict target values

Batch prediction

Single prediction

Generate predictions for an entire dataset.

Manual

Automatic

Predictions

All Jobs

Configuration

Filter by configuration name:

All

 Send to Amazon QuickSight

<input type="checkbox"/> Job name	Created	Input d...	Predicti...	Configurati...	Rows	QuickSight	Status
<input type="checkbox"/> batchInfer-Churn-churn-infer.	01/16/2024 1:47 PM	chur...	V1	Manual	500	Not Sent	Ready

batchInfer-Churn-churn-inference-20240116-1705384070 predictions ready

View



batchInfer-Churn-churn-inference-20240116-1705384070



Prediction (Churn) ↑	Probability	State	Account_Len...	Area_Code	Phone	Intl_Plan	Vmail_Plan
False.	99.6%	MO	176	777	913-2699	no	yes
True.	99.9%	LA	41	766	667-1912	yes	no
False.	94.3%	VT	57	868	388-8558	yes	no
True.	82.7%	IL	108	737	171-7330	yes	no
True.	99.0%	MI	105	777	239-1413	no	yes
True.	99.9%	NV	171	788	638-6590	no	yes
False.	99.9%	NJ	30	787	777-8676	no	yes
True.	72.4%	LA	102	766	986-7915	no	no
False.	99.9%	MT	101	778	735-8094	yes	yes
True.	99.7%	PA	46	806	728-4797	yes	no

Send to Amazon QuickSight

Download



Possible Data Loss Some features might be lost if you save this workbook in the comma-delimited (.csv) format. To preserve these features, save it in an Excel file format.

Save As...

	A1	X	V	Churn	probability	State	Account_Len	Area_Code	Phone	Intl_Plan	Vmail_Plan	Vmail_Mess	Day_Mins	Day_Calls	Day_Charge	Eve_Mins	Eve_Calls	Eve_Charge	Night_Mins	Night_Calls	Night_Charg	Intl_Mins	Intl_Calls	Intl_Charge	CustServ_
1	False.	0.996149063	MO	176	777	913-2699	no	yes	400	1.639329295	3	3.678888958	3.029621242	1	3.419607317	3.182920491	150	3.701859799	4.413037077	6	2.728670064				
2	True.	0.999592840	LA	41	766	667-1912	yes	no	0	7.794604050	5	5.312040367	6.854746883	0	6.273334217	3.207827895	150	6.706022102	6.154159148	6	4.683332958				
3	False.	0.94352734	VT	57	868	388-8558	yes	no	0	7.935873637	4	3.959684641	5.639986180	0	7.062839992	3.918374863	250	8.760670928	4.621756835	4	1.992496250				
4	True.	0.827966749	IL	108	737	171-7330	yes	no	0	7.930825936	5	5.798892880	5.839519585	4	5.875249487	5.680120605	200	6.812622764	5.96763955	5	2.449650220				
5	True.	0.990307450	MI	105	777	239-1413	no	yes	900	2.847955087	6	1.031570046	5.903580922	2	5.493426595	3.969359203	200	5.175925184	5.804561948	4	6.248761583				
6	True.	0.99992889	NV	171	788	638-6590	no	yes	0	2.506859718	0	7.538188755	4.820771773	4	2.329932496	2.165970494	300	5.942645545	4.763000674	2	0.04579997				
7	False.	0.99999362	NJ	30	787	777-8676	no	yes	1100	0.710676124	2	0.903222812	0.259421621	4	5.767228086	3.565753226	300	2.355918041	6.575657100	8	3.374632767				
8	True.	0.72443211	LA	102	766	986-7915	no	no	0	5.687887311	5	8.289093607	7.621895344	7	3.303542137	3.00063173	250	4.62309359	6.492643036	7	2.983794376				
9	False.	0.999885976	MT	101	778	735-8094	yes	yes	700	3.588360933	2	3.126002862	3.70330884	1	5.382883973	3.094817480	300	5.471600397	3.189040156	7	1.426463132				
10	True.	0.997230768	PA	46	806	728-4797	yes	no	0	7.897287971	2	6.801022121	6.790231591	2	5.639936788	3.634473745	250	6.164099356	4.657602211	6	3.824680795				
11	False.	0.999826371	KS	23	758	270-8731	no	yes	600	3.819756838	4	4.672136921	6.528779430	4	4.144668242	4.100951206	350	4.812553207	3.932426103	5	4.852580225				
12	True.	0.999739706	KY	108	758	700-3385	yes	no	0	8.018662062	3	5.559914005	5.731185438	1	5.56820765	3.396843773	150	7.031477708	4.61330192	7	2.460583226				
13	True.	0.999820291	RI	169	827	125-2719	no	yes	200	9.052106118	1	8.012623604	7.820856194	2	6.134068323	3.902298655	250	5.092406155	5.747864807	7	5.774729985				
14	False.	0.999692082	ND	144	786	966-3916	yes	no	0	0.08106538	3	2.175632441	3.986117368	2	2.90724298	3.961153432	250	3.034417793	5.297202667	5	5.307336505				
15	False.	0.999997437	NV	54	788	330-7816	yes	yes	700	0.790086700	6	1.112473159	4.405156972	1	5.215659304	1.446924515	400	4.61854573	3.927020027	7	1.038905372				
16	True.	0.999197840	ME	141	776	779-7963	yes	no	0	6.674579285	3	6.667759935	5.078776440	3	6.316001002	4.511903148	150	5.15755329	5.55073659	2	6.918213861				
17	False.	0.999775409	DC	37	686	918-8971	yes	no	0	1.070607533	4	4.894697527	5.879947166	7	0.890116111	2.719076326	300	1.974834771	4.805393185	6	5.191705209				
18	False.	0.999664723	GA	100	716	904-4319	yes	no	0	1.708152356	4	4.185130448	5.455722141	4	3.261758761	3.401571182	350	4.501701547	5.729775405	5	3.421922780				
19	True.	0.99320972	CA	89	676	983-9540	no	no	0	3.261827484	3	3.558901396	3.884221181	3	3.344603811	6.125512785	100	4.999853724	3.774787803	4	4.15041539				
20	True.	0.994603276	FL	104	707	614-2243	yes	yes	800	4.817981699	3	3.252117447	5.545940878	4	8.29080242	1.460915853	150	4.155818503	5.309736086	3	10.63035446				
21	True.	0.997396051	MS	150	778	413-5633	no	no	0	7.785414816	4	5.816155660	6.561309805	0	6.316268959	1.551120777	150	6.983801087	4.600664852	7	2.800768783				
22	False.	0.999271631	AR	182	658	321-2724	no	yes	600	2.242343403	3	4.977979462	4.911517328	4	3.430484313	5.319065548	300	1.922852194	5.94661786	7	5.354501525				
23	True.	0.99994004	NV	105	788	786-8009	no	yes	300	8.599592151	6	5.84498323	6.043468326	3	5.003471224	3.386103775	150	8.589278886	4.86574815	8	1.009917779				
24	False.	0.999710977	NV	79	788	933-1782	yes	no	0	2.679674465	0	4.944254908	3.422921451	4	2.593079903	7.942064873	200	1.203719422	5.591602786	7	6.599615830				
25	True.	0.996434807	NH	135	787	674-2934	no	no	0	9.481457922	5	9.544502019	8.027989573	6	5.919604961	3.860523637	200	4.424821909	5.156801233	7	7.020224020				
26	True.	0.999952435	MD	148	776	644-9701	no	yes	200	5.897349691	1	7.611285192	7.137412186	3	5.61636512	2.287753296	350	4.833572019	6.282663504	4	6.239499096				
27	True.	0.995718538	AK	109	657	106-8047	yes	yes	500	3.848942118	3	3.064606699	3.438418775	2	3.500655153	4.703801115	200	6.696541107	3.492173646	6	0.306549302				
28	False.	0.95031261	MA	74	776	747-4139	yes	no	0	6.737764666	3	4.220165319	4.984094817	0	6.12828385	4.239082550	200	6.690425252	5.711875928	6	1.78858282				
29	True.	0.999977469	KY	23	758	945-1397	no	yes	300	10.96080799	3	6.397697196	8.946602964	1	9.077496878	2.812568105	200	5.955784182	3.609352652	6	8.480270836				
30	False.	0.999652326	SD	46	836	537-5675	yes	no	0	2.070222965	6	3.410376406	3.918458955	6	4.202524278	4.335802955	300	5.932469514	3.607226800	2	2.30364425				
31	False.	0.999909460	WA	52	876	600-3390	yes	no	0	3.757761834	3	2.296125885	0.27262954	1	6.772100332	5.500355043	200	4.666465477	4.306713991	5	2.180330722				
32	False.	0.999997854	MS	131	778	472-6065	yes	yes	1000	7.749749354	2	5.028137258	4.000240439	1	7.599795049	5.919247149	250	3.560867481	3.905551619	9	5.141102956				
33	True.	0.999584615	UT	131	858	838-4335	yes	yes	400	8.009864918	2	4.581945511	8.054663831	2	7.444083523	2.92263123	200	6.130052396	5.885131325	5	6.583067081				
34	True.	0.999857306	ND	77	786	521-1178	yes	yes	100	8.805333140	4	7.717349134	7.882054204	3	5.172477490	3.015357761	200	7.354065098	3.988758649	6	1.199770749				
35	True.	0.999274909	OK	146	797	272-3591	no	no	0	5.727972654	7	4.129079300	2.613831826	6	5.212882783	7.097688668	50	5.892179343	6.34278728	4	3.22045198				
36	True.	0.998539030	WY	148	878	465-6115	yes	no	0	9.112387013	4	6.020881481	7.957600199	2	6.568827462	4.344151256	200	5.021052170	3.459779559	9	5.867195601				
37	True.	0.999247968	IA	109	736	493-4587	no	no	0	2.415676752	3	3.519686949	5.266656164	1	2.936771768	4.108227700	200	5.442857259	5.263973401	5	2.220411361				
38	False.	0.999756872	PA	53	806	495-4552	no	no	0	0.400337373	3	4.776804328	7.885220565	5	0.716801089	2.208718471	300	2.927605235	6.980603987	5	5.675343551				
39	False.	0.999997744	AT	27	778	100-2119	yes	no	0	2.210222102	2	5.761624057	2.928082861	7	4.160421600	5.526186672	400	2.022024122	5.772000100	8	4.40284200				

Lab Exercises

- Customer Churn
- Defect Detection
- Text Analysis
- Generative AI
- Information Extraction

aws workshop studio

 michael_tw_lin ▾

Amazon SageMaker Canvas Immersion Day

What is Amazon SageMaker Canvas?

Prerequisites

AWS Workshop Portal

Self-Paced Lab

Use case labs

Technology Labs

[Amazon SageMaker Canvas Immersion Day](#) > [Technology Labs](#) > [Ready-to-use Models](#) > [No-Code Computer Vision](#) >

Create your custom Computer Vision model

A Make sure you have performed the steps described in the **Prerequisites** section before beginning this lab.

Agenda

1. Overview
 2. The dataset
 3. Import the dataset in Canvas
 4. Building the ML model
 5. Analyze the ML model
 6. Make the Prediction

Overview

In this lab, we will play the role of a business analyst working in the operations department of a manufacturing company that produces magnetic tiles. Our objective is to develop an image classification model capable of identifying defects in magnetic tiles based on their images. To achieve this, we have been given a dataset containing 200 labeled images of the final magnetic tiles produced on the assembly line. These images have been categorized according to the type of defect present, such as blowholes, cracks, and breaks. Our task is to leverage this dataset to build an accurate and efficient image classification model.

shopper sales conversion
(Retail)

Lab 9 - Predicting electric power consumption (Energy & Utilities)

Lab 10 - Student Dropout or Academic success (EdTech)

Lab 11 - Players Churn Prediction (AWS For Games)

▼ Technology Labs

▼ Ready-to-use Models

▼ No-Code Computer Vision

Using pre-trained Computer Vision models

Create your custom Computer Vision model

► No-Code Natural Language Processing (Text Analysis)

No-Code Intelligent Document Processing

► Import data into SageMaker Canvas from any source

Accelerate Data Preparation

▼ Content preferences

Language

English

The dataset

[Download the training dataset](#)

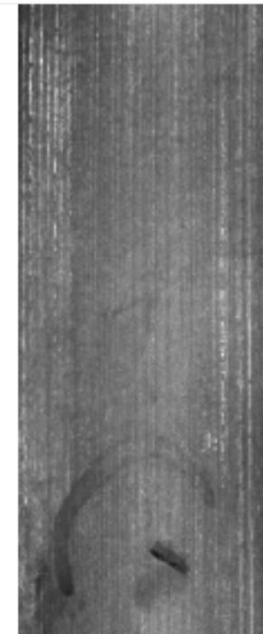
[Download the test dataset](#)

Upon unzipping the training data, you will encounter folders that organize the images based on distinct defect types, including blowholes, breaks, and cracks. It's worth noting that the free folder contains images that are devoid of any defects. Moreover, to assess the efficacy of the model in the testing phase, it's crucial to download inference or test images.

Magnetic-Tiles-Dataset

Blowhole

+ Create a model



Images: 30 ▾ 91-120 of 1266





Ready-to-use models



 You must have the necessary permissions to make predictions with Ready-to-use models. Go to the [SageMaker Console](#) to enable permissions for this account if this hasn't been done already. If you don't have access to the [SageMaker Console](#), contact your administrator. [Learn more](#) 



New!

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Summarize...



Write a blog post...



Explain...



Brainstorm ideas...



List key takeaways...



Improve writing...



Rewrite...



Outline...



Change tone...



Reply to this...



Simplify...



Compare...



Paraphrase...

Get started now

Search use case

Last used 

Grid

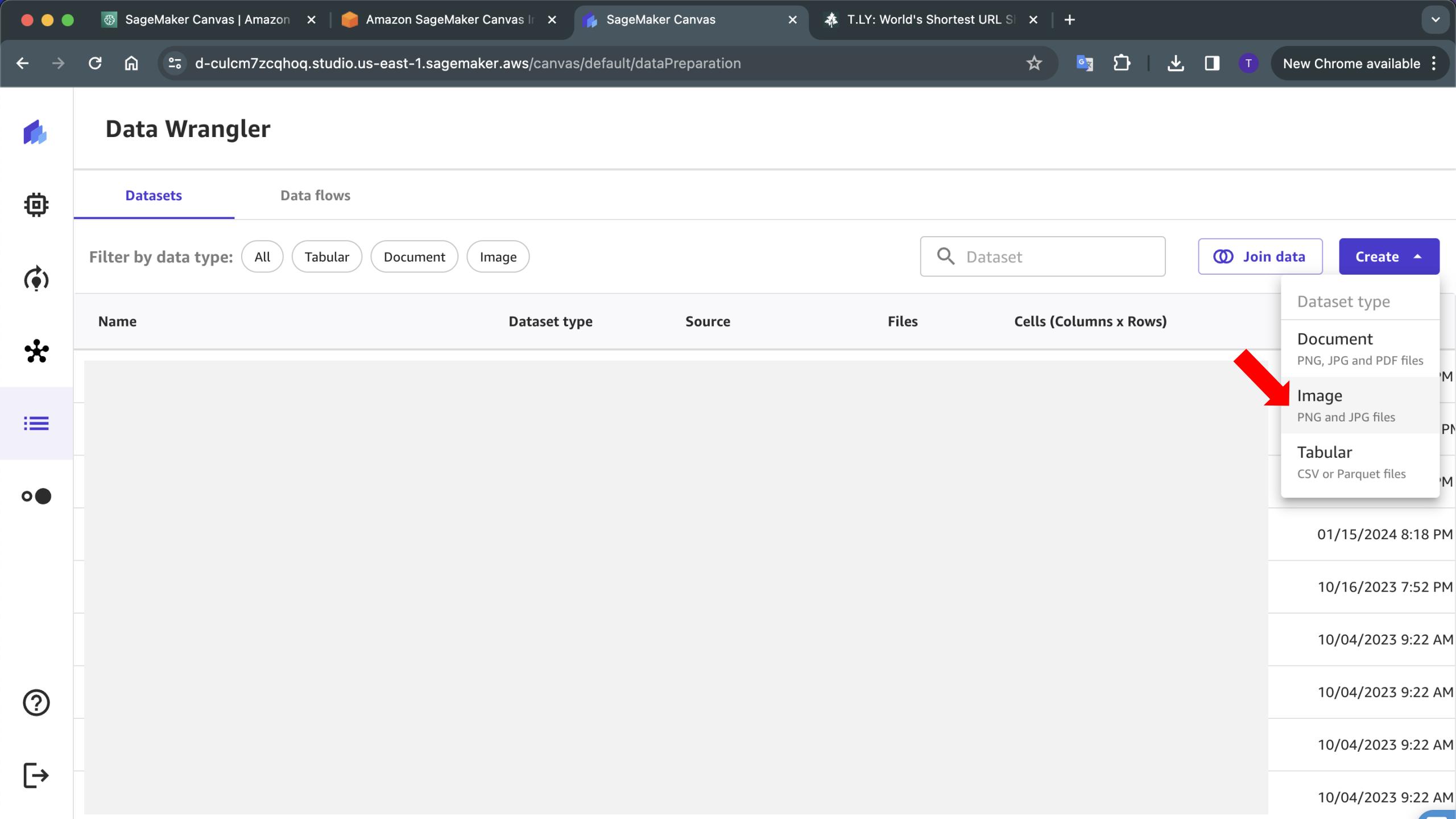
List

Can't find the right model? [Create a custom model](#)

Generative AI using foundation models

Our content generation models can help you craft engaging narratives, articles, answer questions, and more, tailored to your needs.





Data Wrangler

-
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-

Datasets

Data flows

Filter by data type: All Tabular Document Image

Dataset

Join data

Create ▾

Name	Dataset type	Source	Files	Cells (Columns x Rows)	Last updated
<input type="checkbox"/> churn-inference-20240116	V1	Tabular	S3	10,000 (20 x 500)	01/16/2024 1:47 PM
<input type="checkbox"/> CustomerData	V1	Tabular	S3	105,000 (21 x 5,000)	01/16/2024 12:19 PM
<input type="checkbox"/> FinancialData-For-LLM-Finetuning	V1	Tabular	S3	224 (2 x 112)	01/15/2024 8:28 PM
<input type="checkbox"/> canvas-sample-databricks-dolly-15k.csv	V1	Tabular	S3	4,000 (2 x 2,000)	01/15/2024 8:18 PM
<input type="checkbox"/> pdf-20231016	V1	Tabular	S3	10,000 (10 x 1,000)	10/16/2023 7:52 PM
<input type="checkbox"/> canvas-sample-housing.csv	V1	Tabular	S3	600 (5 x 120)	10/04/2023 9:22 AM
<input type="checkbox"/> canvas-sample-product-descriptions.csv	V1	Tabular	S3	19,000 (19 x 1,000)	10/04/2023 9:22 AM
<input type="checkbox"/> canvas-sample-loans-part-1.csv	V1	Tabular	S3	243,000 (6 x 40,500)	10/04/2023 9:22 AM
<input type="checkbox"/> canvas-sample-maintenance.csv	V1	Tabular	S3	9,000 (9 x 1,000)	10/04/2023 9:22 AM
<input type="checkbox"/> canvas-sample-shipping-logs.csv	V1	Tabular	S3	12,000 (12 x 1,000)	10/04/2023 9:22 AM

Create an image dataset



Dataset name

magnetic-tiles-train

Use only letters, numbers, spaces, dashes, colons, and underscores up to 64 characters.

Cancel

Create

magnetic-tiles-....: Create Image dataset

Data Source: Local upload

Upload files to import

Drag and drop files and folders here

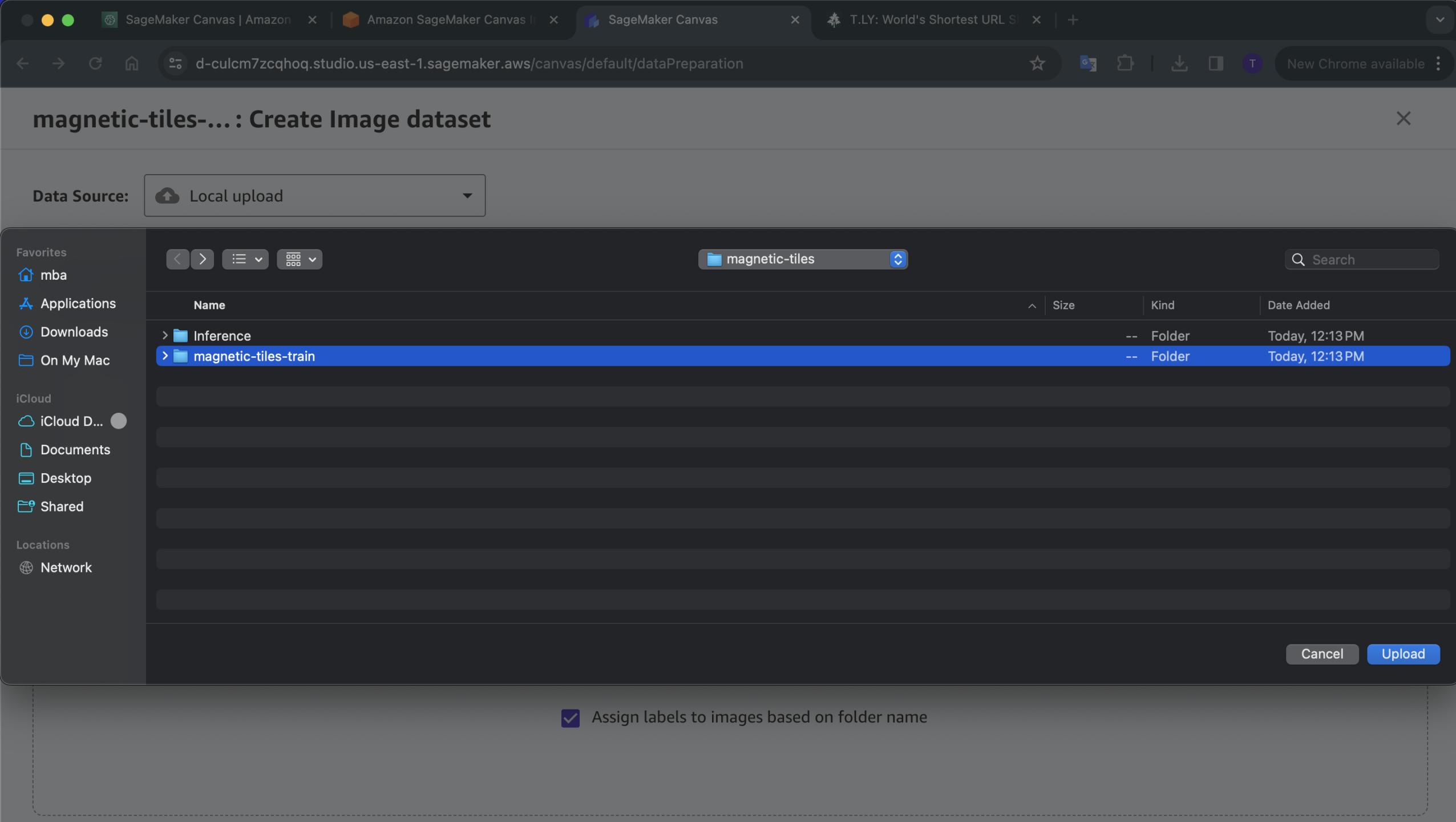
on

 Select files

 Select folders

- A maximum of 200 images can be uploaded at a time.
 - Supported formats: JPG and PNG.
 - Image must be smaller than 30 MB.

Assign labels to images based on folder name



Data Source:  Local upload ▾

Upload files to import

Drag and drop files and folders here

or

 Select files

 Select folders

- A maximum of 200 images can be uploaded at a time.
- Supported formats: JPG and PNG.
- Image must be smaller than 30 MB.

Assign labels to images based on folder name

200 files ready to import

[Delete all](#)

 Break (50 of 50) 

 Free (60 of 60) 

 Blowhole (50 of 50) 

 Crack (40 of 40) 

[Cancel](#)

[Create dataset](#)



SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL S | +

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/dataPreparation

New Chrome available :

Data Wrangler

Datasets Data flows

Filter by data type: All Tabular Document Image

Dataset

Join data

Create

Name	Dataset type	Source	Files	Cells (Columns x Rows)	Last updated
magnetic-tiles-train	V1 Image	Local			01/16/2024 2:17 PM



New! Amazon SageMaker Canvas supports comprehensive data preparation including a conversational interface for data transformation, Gen AI capabilities to access, evaluate, and fine-tune LLMs, configuration of parameters to build models, and the ability to directly deploy models to real-time endpoints. [Learn more](#)



My models

Search models

+ New model



Grid List



Filter by problem type: 2 category prediction

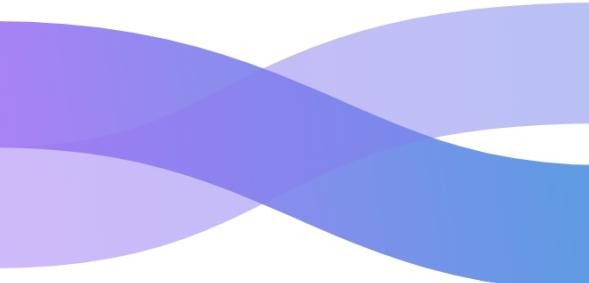
Fine-tune foundation model

Last viewed



Ready

Churn



Versions

1

Target

Churn

Problem type

2 category prediction

Updated

2024-1-16 1:40 PM

View



New! Amazon SageMaker Canvas supports comprehensive data preparation including a conversational interface for data transformation, Gen AI capabilities to access, evaluate, and fine-tune LLMs, configuration of parameters to build models, and the ability to directly deploy models to real-time endpoints. [Learn more](#)



My models

Search models

+ New model



Grid List

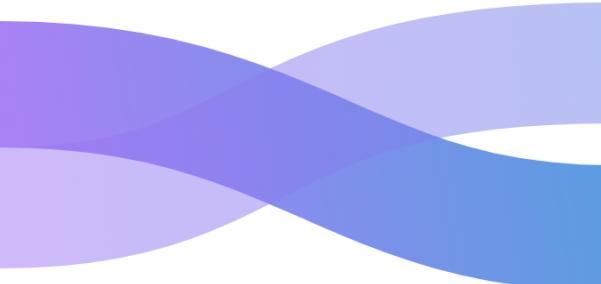
Filter by problem type: 2 category prediction

Fine-tune foundation model

Last viewed

Ready

Churn



Versions

1

Target

Churn

Problem type

2 category prediction

Updated

2024-1-16 1:40 PM

[View](#)





Create new model



Model name

Model name

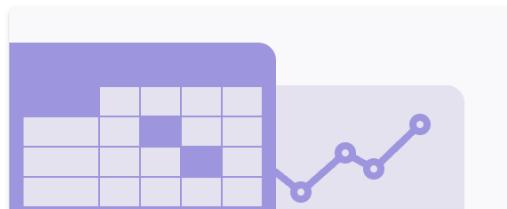
Magnetic-Tiles-Defect-Model

Use only letters, numbers, and underscores. Up to 32 characters.



Problem type

Select the problem type you want the model to solve.



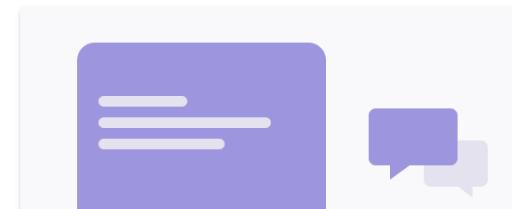
Predictive analysis

Build models using tabular datasets to predict single or multiple categories as well as regression and time-series forecast problems.



Image analysis

Build models using image datasets to predict single or multiple categories for image classification problems.



Text analysis

Build models using tabular datasets to predict single or multiple categories for text classification problems.



Fine-tune foundation model

Customize a foundation model on your data to improve its performance for a specific task or domain.

[Cancel](#)

[Create](#)

[Select](#)[Build](#)[Analyze](#)[Predict](#)[Deploy](#)

Select dataset

You can select a dataset that has already been imported or you can create a new dataset.

[+ Create dataset](#) Search datasets in Canvas[All](#)

Name	Source	Images	Created	Status
magnetic-tiles-train	V1 Local	200	01/16/2024 2:17 PM	Ready

[Select dataset](#)

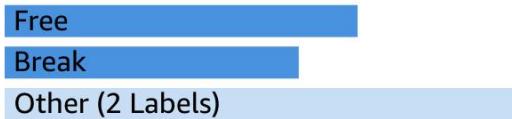
Select

Build

Analyze

Predict

Deploy

Label Distribution**Model type**

Single-label image prediction

Your model will predict the one correct label that you want assigned to an image.

Quick build

magnetic-tiles-train

[Edit dataset](#)

Total images 200

Labeled 200

Unlabeled 0

 Search for label

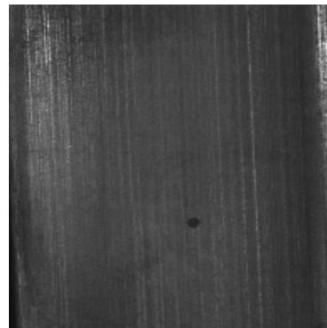
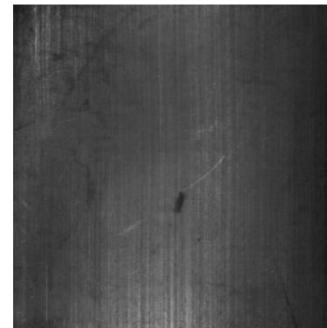
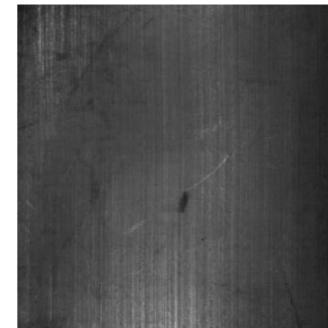
Blowhole 50

Break 50

Crack 40

Free 60

Images per page 30 ▾ 1-30 of 200 < >

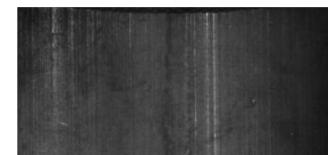


Blowhole

Blowhole

Blowhole

Blowhole



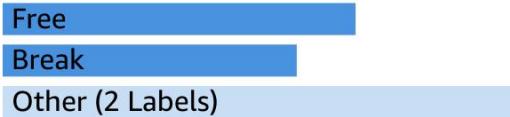
Select

Build

Analyze

Predict

Deploy

Label Distribution**Model type**

Single-label image prediction

Your model will predict the one correct label that you want assigned to an image.

magnetic-tiles-train

[Edit dataset](#)

Total images	200
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Labeled	200
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Unlabeled	0
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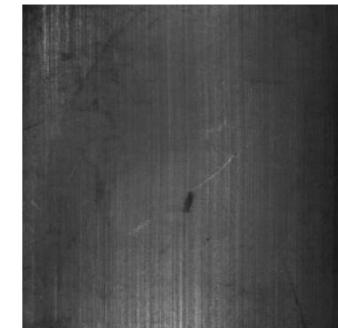
<input type="text"/> Search for label	≡
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Blowhole	50
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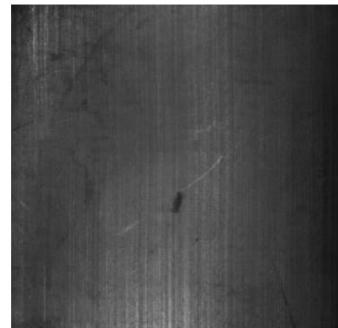
Break	50
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Crack	40
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Free	60
------	----



Blowhole



Blowhole



Blowhole



Blowhole

**Quick build****Quick build**

Choose speed over accuracy. Building usually takes between 15-30 minutes. You can't share quick build models.

Standard build

Choose accuracy over speed. Building usually takes between 2-5 hours



Select

Build

Analyze

Predict

Deploy

Label Distribution**Model type**

Single-label image prediction

Your model will predict the one correct label that you want assigned to an image.

Standard build



magnetic-tiles-train

[Edit dataset](#)

^

Total images 200

Labeled 200

Unlabeled 0

 Search for label

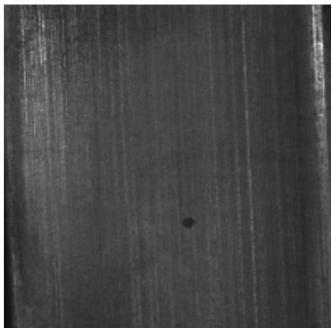
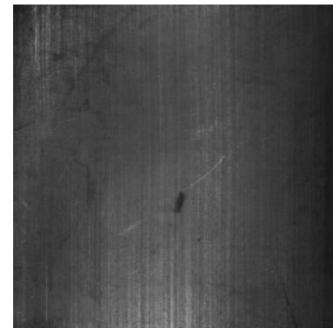
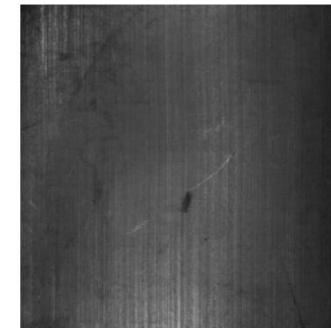
Blowhole 50

Break 50

Crack 40

Free 60

Images per page 30 ▾ 1-30 of 200 < >



Blowhole

Blowhole

Blowhole

Blowhole



SageMaker Canvas | Amazon | SageMaker Canvas | T.LY: World's Shortest URL S | +

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Magnetic-Tiles-Defect-Model

New Chrome available :

My models > Magnetic-Tiles-Defect-Model > Version 1

Add version

⋮

Select Build Analyze Predict Deploy

Model overview

Your model is being created. Standard build usually takes 2 to 5 hours.

Expected build time: 2 to 5 hours

Build type: Standard build

Detailed progress: Pre-training

Pre-training progress bar: 0%

Illustration of a person working at a desk with a laptop and coffee cup.



New! Amazon SageMaker Canvas supports comprehensive data preparation including a conversational interface for data transformation, Gen AI capabilities to access, evaluate, and fine-tune LLMs, configuration of parameters to build models, and the ability to directly deploy models to real-time endpoints. [Learn more](#)



My models

Search models

+ New model

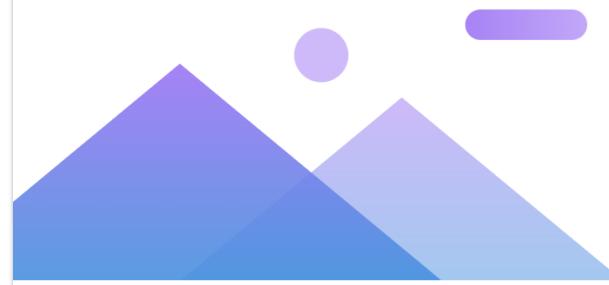


Grid List



Ready

Magnetic-Tiles-Defect-Model



Versions

1

Target

--

Problem type

Single-label image prediction

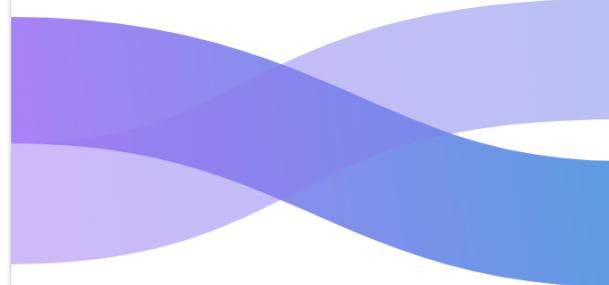
Updated

2024-1-16 2:44 PM

[View](#)

Ready

Churn



Versions

1

Target

Churn

Problem type

2 category prediction

Updated

2024-1-16 1:40 PM

[View](#)



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d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/group/Magnetic-Tiles-Defect-Model

My models > Magnetic-Tiles-Defect-Model

Add version Share

Versions

Select a version to view details

Show advanced metrics

Version	Status	Created	Dataset	Model score	Shared	Model Registry
v1	Ready	01/16/2024 2:18 PM	magnetic-...	90%	--	Not Registered ⓘ

A red arrow points to the 'v1' version label in the table.

Select

Build

Analyze

Predict

Deploy

Model status

90%

Predict

Deploy

The model predicts the correct labels 90% of the time.

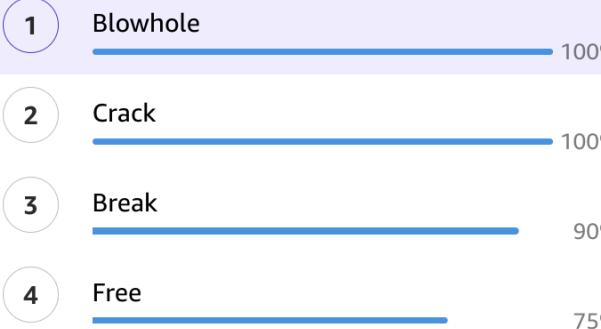
Overview

Scoring

☰

Per Label performance ⓘ ↓

Search for label

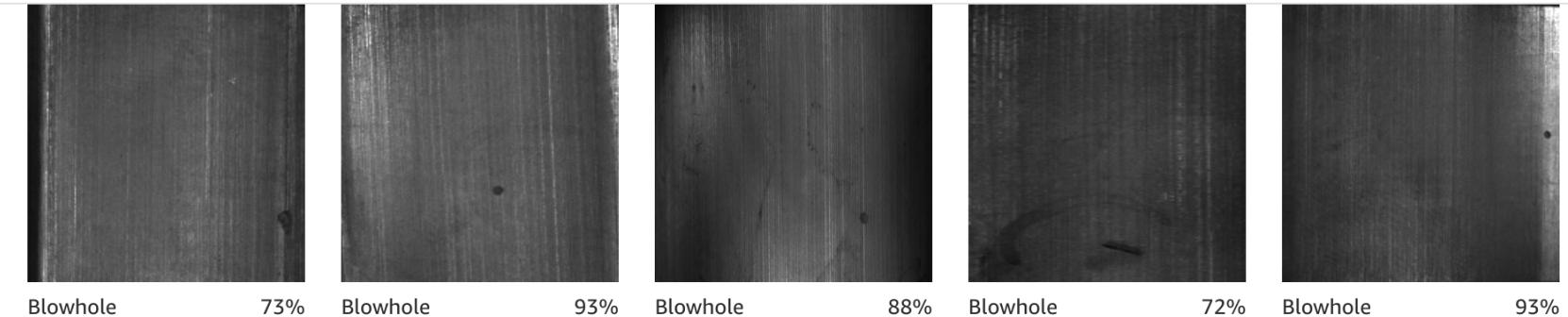


Blowhole performance ⓘ

 Heatmap ⓘ

Correctly predicted

Incorrectly predicted



Select

Build

Analyze

Predict

Deploy

Model status

90%

[Predict](#)[Deploy](#)

The model predicts the correct labels 90% of the time.

[Overview](#)[Scoring](#)

▲

Per Label performance ⓘ ↓

 Search for label

1 Blowhole

100%

2 Crack

100%

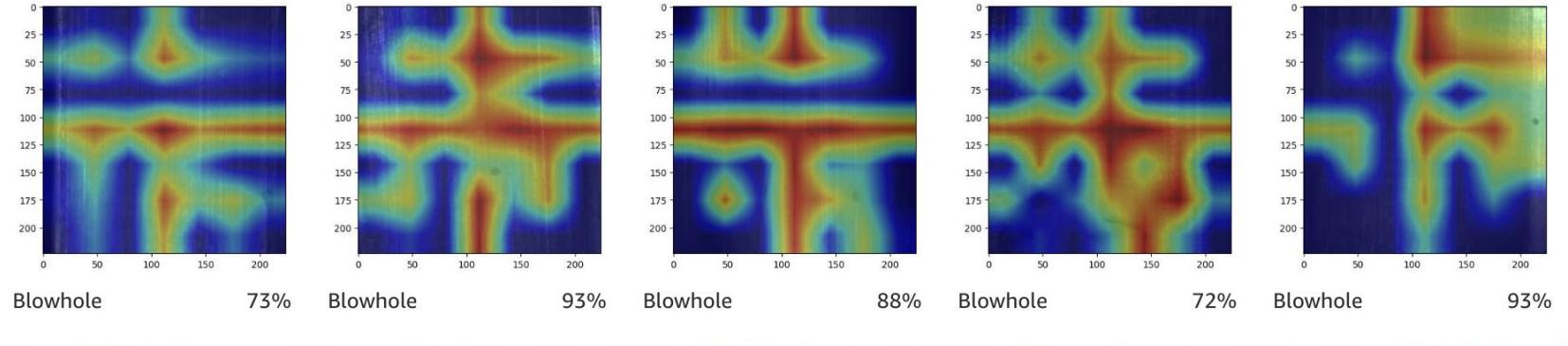
3 Break

90%

4 Free

75%

Blowhole performance ⓘ

[Correctly predicted](#)[Incorrectly predicted](#) Heatmap ⓘ

Select

Build

Analyze

Predict

Deploy

Model status

90%

[Predict](#)[Deploy](#)

The model predicts the correct labels 90% of the time.

Overview

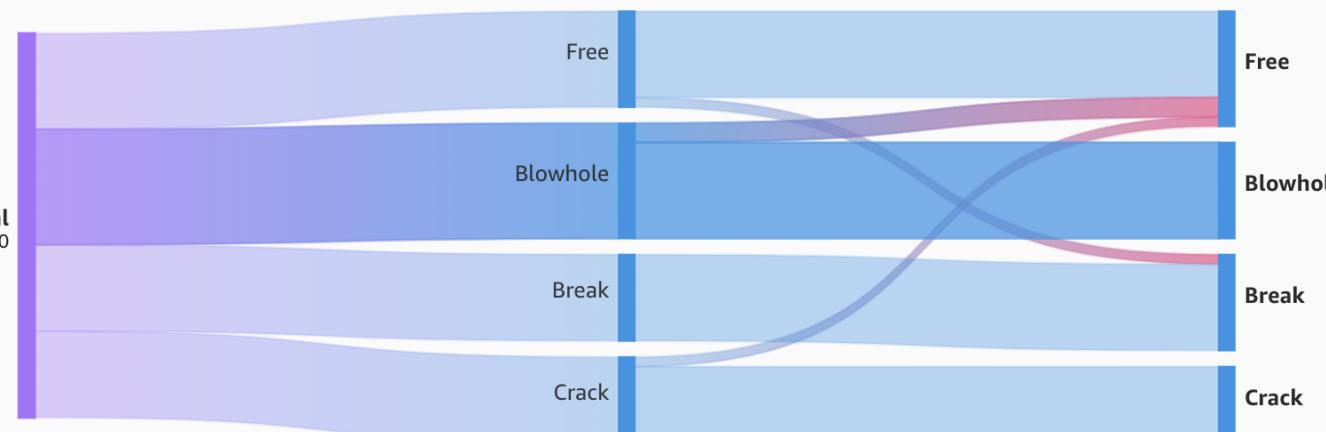
Scoring

↗

All predictions

Predicted

Actual

Total
40

dataset, the model **predicted 100%** of them to be **Blowhole**.

Individual labels

Class	Precision	Recall
Break	100%	90%
Free	90%	75%
Crack	88.889%	100%
Blowhole	83.333%	100%

Select

Build

Analyze

Predict

Deploy

Model status

90%

The model predicts the correct labels 90% of the time.

[Predict](#)[Deploy](#)

Overview

Scoring

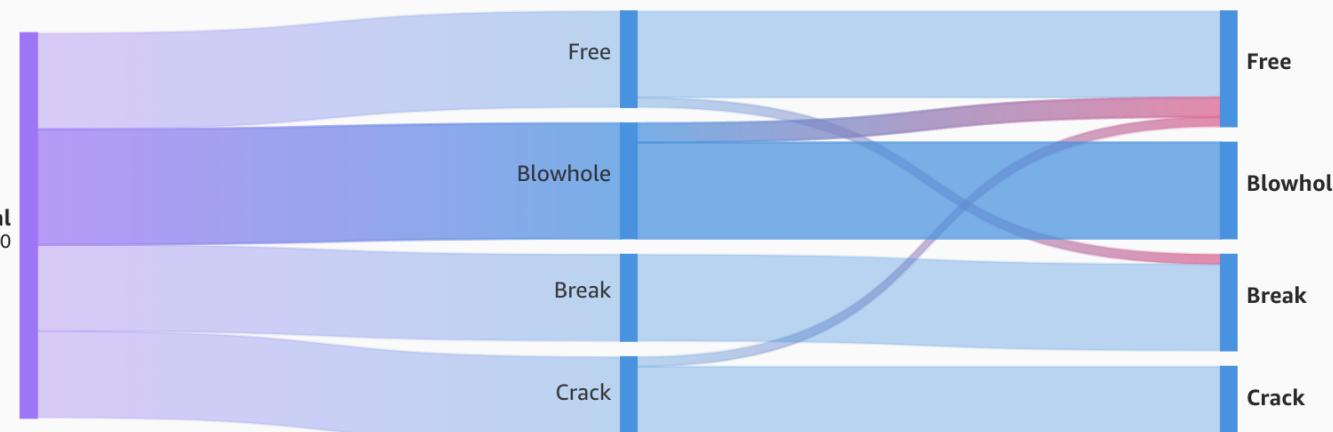
⋮

Predicted Label vs. Actual Label

All predictions

Predicted

Actual

Total
40

dataset, the model **predicted 100%** of them to be **Blowhole**.

Individual labels

Class	Precision	Recall
Break	100%	90%
Free	90%	75%
Crack	88.889%	100%
Blowhole	83.333%	100%

Select

Build

Analyze

Predict

Deploy

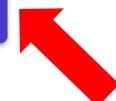
Run predictions

[Single prediction](#)[Batch prediction](#)

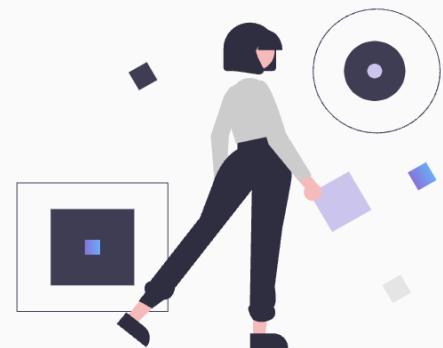
Generate predictions for a single image.

[Import image](#)

Start by importing an image

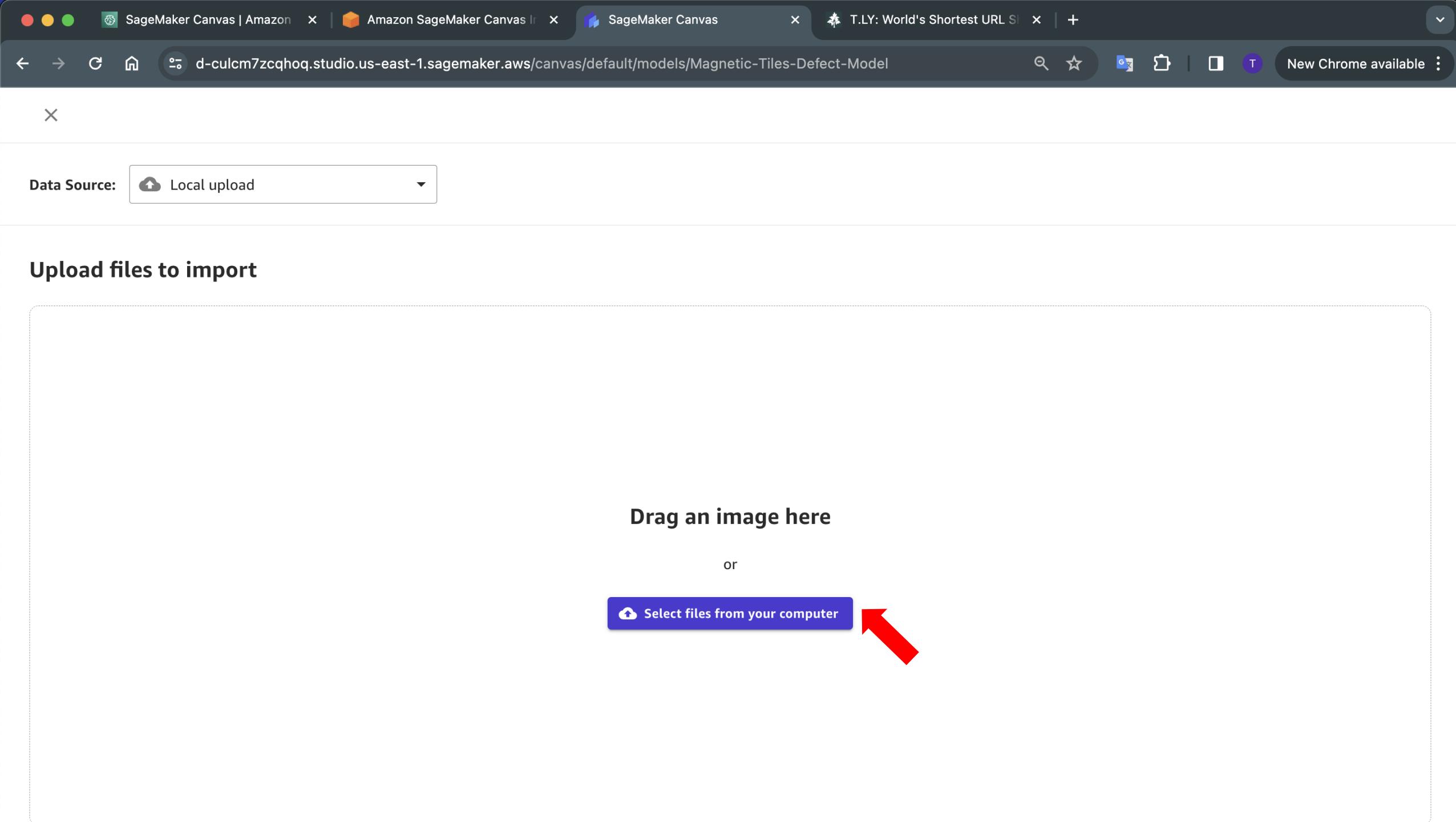
[+ Import](#)

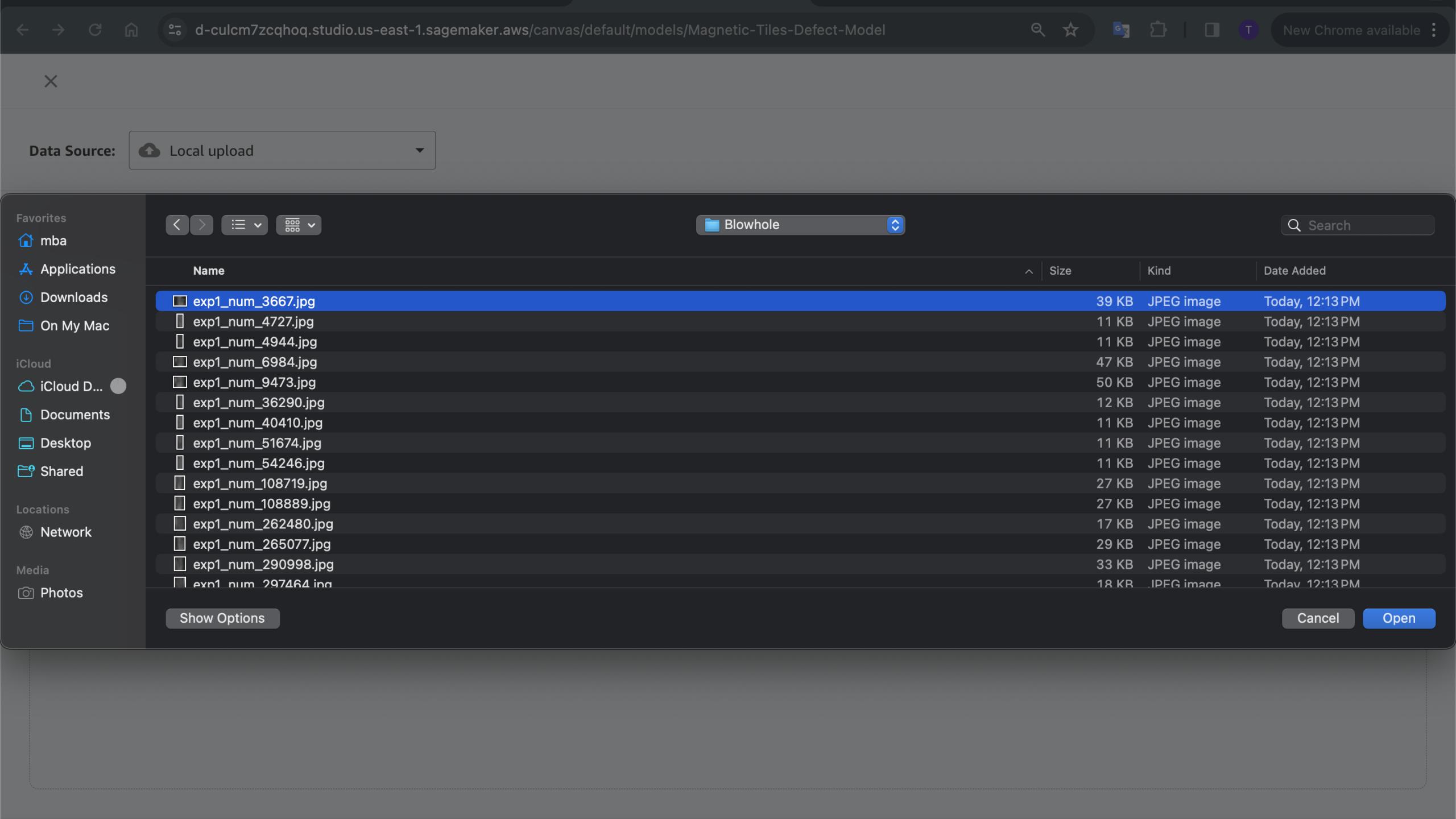
Prediction results



Prediction results will be displayed here after clicking Generate predictions.







X

Data Source:  Local upload ▾

Upload files to import

Drag an image here

or

 Select files from your computer

1 file ready to import

Delete all

exp1_num_3667.jpg



Cancel

Create dataset

SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL S | +

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Magnetic-Tiles-Defect-Model

My models > Magnetic-Tiles-Defect-Model > Version 1

Add version

Select Build Analyze Predict Deploy

Run predictions

Single prediction Batch prediction

Generate predictions for a single image.

Import image



Prediction results

Confidence ⓘ

Defect Type	Confidence (%)
Blowhole	96%
Break	3%
Free	1%
Crack	1%

?

→

Lab Exercises

- Customer Churn
- Defect Detection
- Text Analysis
- Generative AI
- Information Extraction

Amazon SageMaker Canvas Immersion Day

What is Amazon SageMaker Canvas?

► Prerequisites

► Use case labs

▼ Technology Labs

▼ Ready-to-use Models

► No-Code Computer Vision

▼ No-Code Natural Language Processing (Text Analysis)

Using pre-trained Natural Language Processing models

[Create your custom Natural Language Processing model](#)

No-Code Intelligent Document Processing

► Import data into SageMaker Canvas from any source

▼ Content preferences

Language

English



Create your custom Natural Language Processing model

Agenda

1. [Overview](#)
2. [The dataset](#)
3. [Building the ML model](#)
4. [Analyze the ML model](#)
5. [Make the Prediction](#)

Overview

In this lab, you will assume the role of a business analyst working for an ecommerce company, in their product team. You will use product reviews from your customers to gauge the overall sentiment for the products that are listed in your product catalog. This allows you to improve the product selection that is being offered to your end customers, improving customer retention, cart value and revenue.

The dataset

[Download the training dataset](#)

For our dataset, we use a sample dataset containing Amazon reviews taken from the larger dataset "Amazon reviews - Full", which was published with the article "Character-level Convolutional Networks for Text Classification" (Xiang Zhang et al., 2015). This sample dataset contains 1803 records, where each record contains unstructured text from the reviews of products on Amazon.com. The data schema is as follows:

Ready-to-use models

You must have the necessary permissions to make predictions with Ready-to-use models. Go to the [SageMaker Console](#) to enable permissions for this account if this hasn't been done already. If you don't have access to the [SageMaker Console](#), contact your administrator. [Learn more](#)



New!

Accelerate your productivity using generative AI

Content generation, extraction, summarization, and many more tasks are easier to perform using foundation models from Amazon Bedrock and publicly available models from Amazon SageMaker JumpStart.



Summarize...



Write a blog post...



Explain...



Brainstorm ideas...



List key takeaways...



Improve writing...



Rewrite...



Outline...



Change tone...



Reply to this...



Simplify...



Compare...



Paraphrase...

Get started now



Search use case



Last used

Grid

List

Can't find the right model? [Create a custom model](#)

Generative AI using foundation models

Our content generation models can help you craft engaging narratives, articles, answer questions, and more, tailored to your needs.



New! Amazon SageMaker Canvas supports comprehensive data preparation including a conversational interface for data transformation, Gen AI capabilities to access, evaluate, and fine-tune LLMs, configuration of parameters to build models, and the ability to directly deploy models to real-time endpoints. [Learn more](#)

X



My models

Search models

+ New model

Grid List

Filter by problem type:

Single-label image prediction

2 category prediction

Last viewed

Ready

Magnetic-Tiles-Defect-Model

Versions

1

Target

--

Problem type

Single-label image prediction

Updated

2024-1-16 4:45 PM

[View](#)

Ready

Churn

Versions

1

Target

Churn

Problem type

2 category prediction

Updated

2024-1-16 1:40 PM

[View](#)





Create new model



Model name

Model name

Product Reviews Analysis

Use only letters, numbers, and underscores up to 32 characters.



Problem type

Select the problem type you want the model to solve.



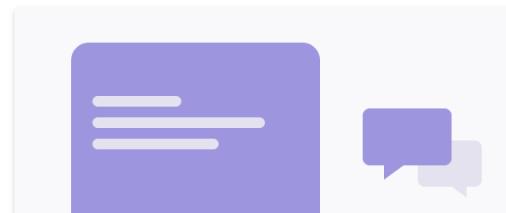
Predictive analysis

Build models using tabular datasets to predict single or multiple categories as well as regression and time-series forecast problems.



Image analysis

Build models using image datasets to predict single or multiple categories for image classification problems.



Text analysis

Build models using tabular datasets to predict single or multiple categories for text classification problems.



Fine-tune foundation model

Customize a foundation model on your data to improve its performance for a specific task or domain.

Cancel

Create

Updated

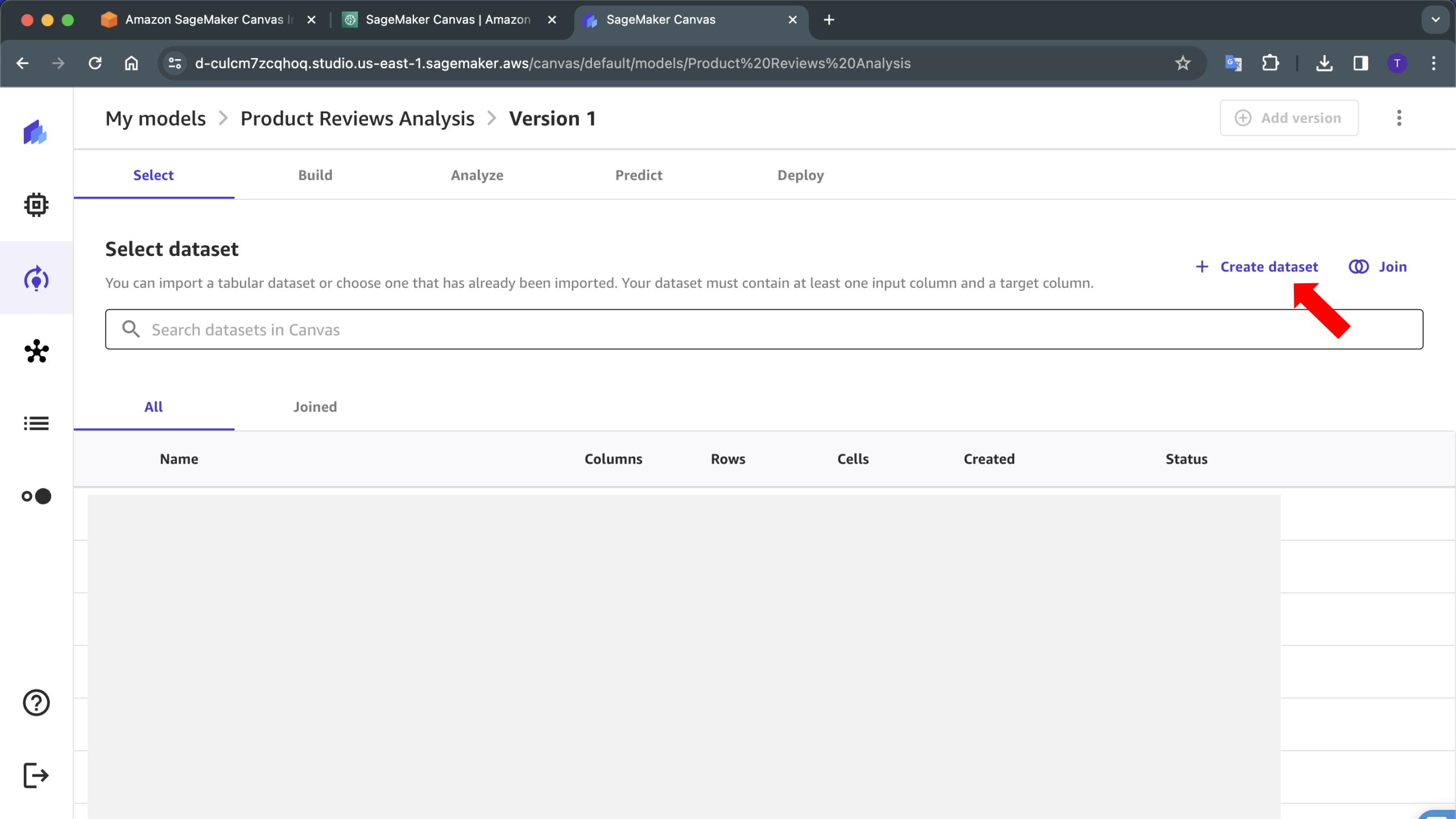
2024-1-16 1:45 PM

Updated

2024-1-16 1:40 PM

[View](#)

[View](#)



Select

Build

Analyze

Predict

Deploy

Select dataset

You can import a tabular dataset or choose one that has already been imported. Your dataset must contain at least one input column and a target column.

[+ Create dataset](#)[Join](#) Search datasets in Canvas

All

Joined

Name

 churn-inference-20240116 CustomerData FinancialData-For-LLM-Finetuning canvas-sample-databricks-dolly-15k.csv

Create a tabular dataset



Dataset name

Product Reviews Analysis

Use only letters, numbers, spaces, dashes, colons, and underscores up to 64 characters.

[Cancel](#)[Create](#)

Status

2024 1:47 PM Ready

2024 12:19 PM Ready

2024 8:28 PM Ready

01/15/2024 8:18 PM Ready

10/04/2023 9:21 AM Ready

10/04/2023 9:21 AM Ready

10/04/2023 9:21 AM Ready

[Select dataset](#)

Amazon SageMaker Canvas | Amazon SageMaker Canvas | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

Product Review....: Create Tabular dataset

Data Source: Local upload

Upload files to import

Drag a CSV or Parquet file here

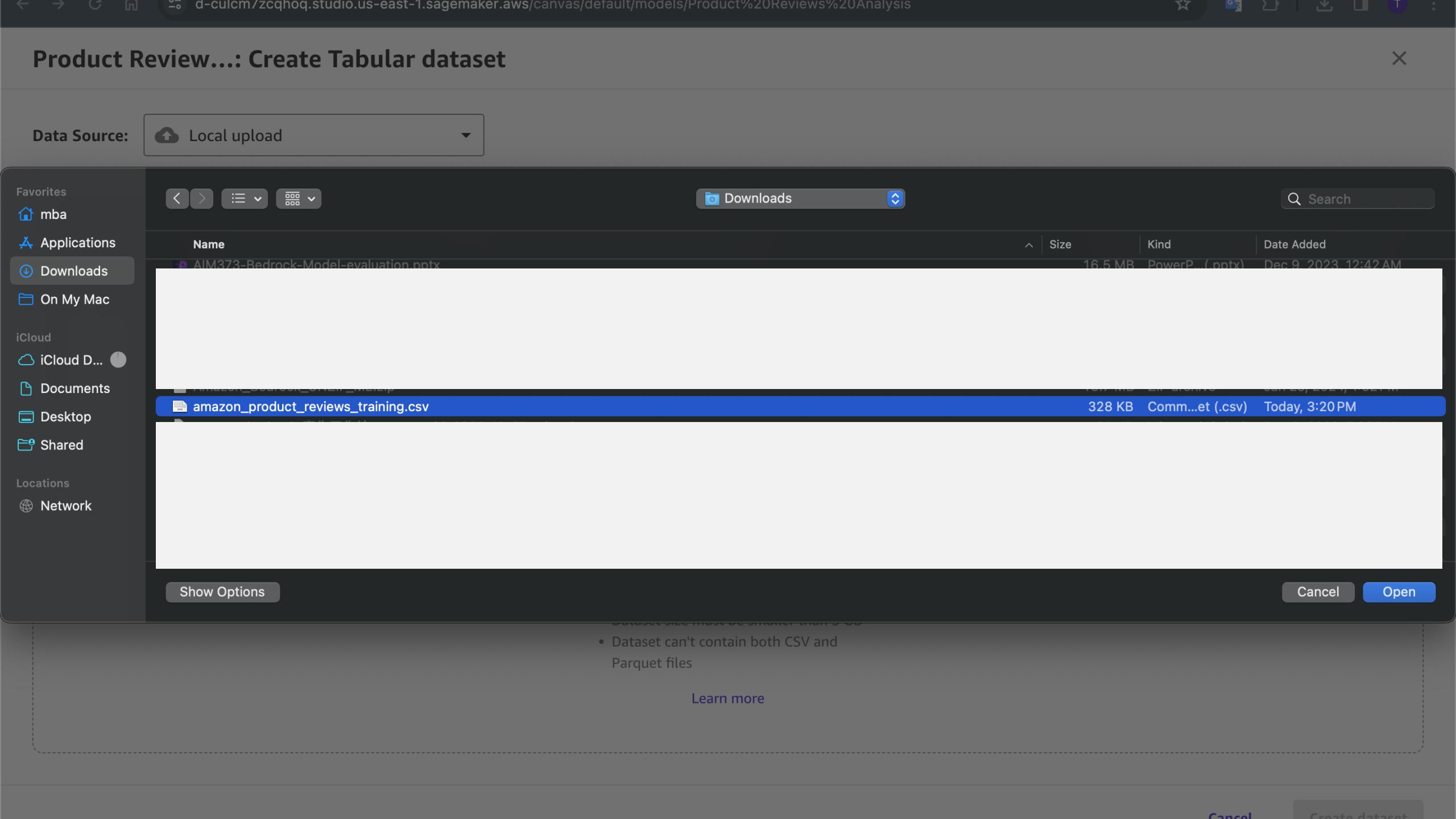
or

Select files from your computer

- Dataset size must be smaller than 5 GB
- Dataset can't contain both CSV and Parquet files

Learn more





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d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

Product Review....: Create Tabular dataset

Data Source: Local upload

Upload files to import

Drag a CSV or Parquet file here

or

Select files from your computer

- Dataset size must be smaller than 5 GB
- Dataset can't contain both CSV and Parquet files

Learn more

1 file ready to import

amazon_product_reviews_training.csv

Delete all

Preview

A screenshot of the SageMaker Canvas interface showing the process of creating a tabular dataset from product reviews. The 'Data Source' is set to 'Local upload'. On the left, instructions for uploading files are provided, including a dashed-dotted area for dragging files and a button to select files from a computer. A list of restrictions is also shown. On the right, a summary indicates '1 file ready to import' with the file name 'amazon_product_reviews_training.csv'. A red arrow points to the 'Preview' button at the bottom of this panel.

Amazon SageMaker Canvas | Amazon SageMaker Canvas | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

Product Review....: Create Tabular dataset

Data Source: Local upload

Upload files to import

Import preview Previewing first 100 rows Close preview Create dataset

amazon_product_reviews_training.csv Use first row as header Delete

Product_Review	Review_ID	Category
I enjoyed Margaret Creighton's b...	R100O1RVI24GZ0	Books
Kevin Kline is the most versatile,...	R106N066IUN8ZV	Video
For me, Wolfe's detailing of bot...	R10F27Y6VE2YLQ	Books
One of the funniest movies of al...	R10JRI545QM2CV	Video
Love this CD!	R10KMF52KBOUI4	Music



[Select](#)[Build](#)[Analyze](#)[Predict](#)[Deploy](#)

Select dataset

You can import a tabular dataset or choose one that has already been imported. Your dataset must contain at least one input column and a target column.

[+ Create dataset](#) [Join](#) Search datasets in Canvas[All](#)[Joined](#)[Name](#)[Columns](#)[Rows](#)[Cells](#)[Created](#)[Status](#)[Product Reviews Analysis](#)

V1

3

600

1,800

02/01/2024 4:09 PM

Ready

[Select dataset](#)

Amazon SageMaker Canvas | Amazon SageMaker Canvas | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

Add version

My models > Product Reviews Analysis > Version 1

Select Build Analyze Predict Deploy

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column

Select model type

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

Multi-category text prediction

Your model classifies your target column into 2 or more categories.

Quick build

Product Reviews Analysis

Column name	Data type	Feature type	Missing	Unique
Review_ID	Text	-	0.00% (0)	600
Product_Review	Text	-	0.00% (0)	600
Category	Text	Categorical	0.00% (0)	3

My models > Product Reviews Analysis > Version 1

[Add version](#)

⋮

Select

Build

Analyze

Predict

Deploy

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column

 X ▾

Value distribution

**Select model type**

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

Multi-category text prediction

Your model classifies your target column into 2 or more categories.

Quick build

Product Reviews Analysis



^

Column name	Data type	Feature type	Missing	Unique
Review_ID	Text	-	0.00% (0)	600
Product_Review	Text	-	0.00% (0)	600
Category	Text	Categorical	0.00% (0)	3



Amazon SageMaker Canvas | Amazon SageMaker Canvas | Amazon SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

Add version

My models > Product Reviews Analysis > Version 1

Select Build Analyze Predict Deploy

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column: Category

Value distribution:

- Books
- Music
- Video

Select model type

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

Multi-category text prediction

Your model classifies your target column into 2 or more categories.

Quick build

Product Reviews Analysis

Column name	Data type	Feature type	Missing	Unique
Review_ID	Text	-	0.00% (0)	600
Product_Review	Text	-	0.00% (0)	600
Category	Text	Categorical	0.00% (0)	3

Amazon SageMaker Canvas | Amazon SageMaker Canvas | Amazon SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

Add version

My models > Product Reviews Analysis > Version 1

Select Build Analyze Predict Deploy

Select a column to predict

Choose the target column. The model that you build predicts values for the column that you select.

Target column: Category

Value distribution:

- Books
- Music
- Video

Select model type

SageMaker Canvas automatically recommends the appropriate model type for your analysis.

Multi-category text prediction

Your model classifies your target column into 2 or more categories.

Quick build

Product Reviews Analysis

Column name	Data type	Feature type	Missing	Unique
Review_ID	Text	-	0.00% (0)	600
Product_Review	Text	-	0.00% (0)	600
Category	Text	Categorical	0.00% (0)	3

Red arrow pointing to the "Quick build" button.

Amazon SageMaker Canvas | Amazon SageMaker Canvas | SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

My models > Product Reviews Analysis > Version 1

Add version

Select Build Analyze Predict Deploy

Model overview

Your model is being created. Quick build usually takes 15 to 30 minutes.

Expected build time: 15 to 30 minutes

Build type: Quick build

Detailed progress: Pre-training



?

→

New! Amazon SageMaker Canvas supports comprehensive data preparation including a conversational interface for data transformation, Gen AI capabilities to access, evaluate, and fine-tune LLMs, configuration of parameters to build models, and the ability to directly deploy models to real-time endpoints. [Learn more](#)



My models

Search models

+ New model

Grid List

Ready

Product Reviews Analysis



Versions

1

Target

Category

Problem type

Multi-category text prediction

Updated

2024-2-1 4:32 PM

[View](#)

Ready

Magnetic-Tiles-Defect-Model



Versions

1

Target

--

Problem type

Single-label image prediction

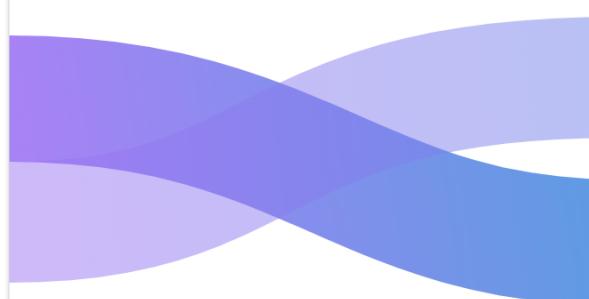
Updated

2024-1-16 4:45 PM

[View](#)

Ready

Churn



Versions

1

Target

Churn

Problem type

2 category prediction

Updated

2024-1-16 1:40 PM

[View](#)



Amazon SageMaker Canvas | Domain: QuickSetupDomain- SageMaker Canvas +

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/group/Product%20Reviews%20Analysis

My models > Product Reviews Analysis

Add version Share

Versions

Select a version to view details

Show advanced metrics

Version	Status	Created	Dataset	Model score	Shared	Model Registry
v1	Ready	02/01/2024 4:07 PM	Product R...	86.667%	--	Not Registered ⓘ

A red arrow points to the 'v1' button in the first row of the table.

Amazon SageMaker Canvas | Domain: QuickSetupDomain- SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

My models > Product Reviews Analysis > Version 1

Select Build Analyze Predict Deploy

Model status

86.667%

The model predicts the correct Category 86.667% of the time.

Predict Deploy

Overview Scoring

Per Category performance

Category	Confidence
Books	100%
Music	88.235%
Video	64.706%

Books performance

Category	Confidence	Description
Books	99.796%	Since the 1992 presidential run of H. Ross Perot, there has been a growing awareness in American politics and society of the financial b...
Books	99.787%	I recently purchased this book and am thrilled with the command its helped me achieve of the english language. This book contains idi...
Books	99.683%	In recent years, Stephenson's work has become increasingly complicated. The Baroque cycle is a study in intricate plots, characters that ...
Books	99.571%	The author was born in Vienna but left when he was 11. After the war he returned, to get his university education, and served as a corre...

Select

Build

Analyze

Predict

Deploy

Model status

86.667%

[Predict](#)[Deploy](#)

The model predicts the correct **Category** 86.667% of the time.

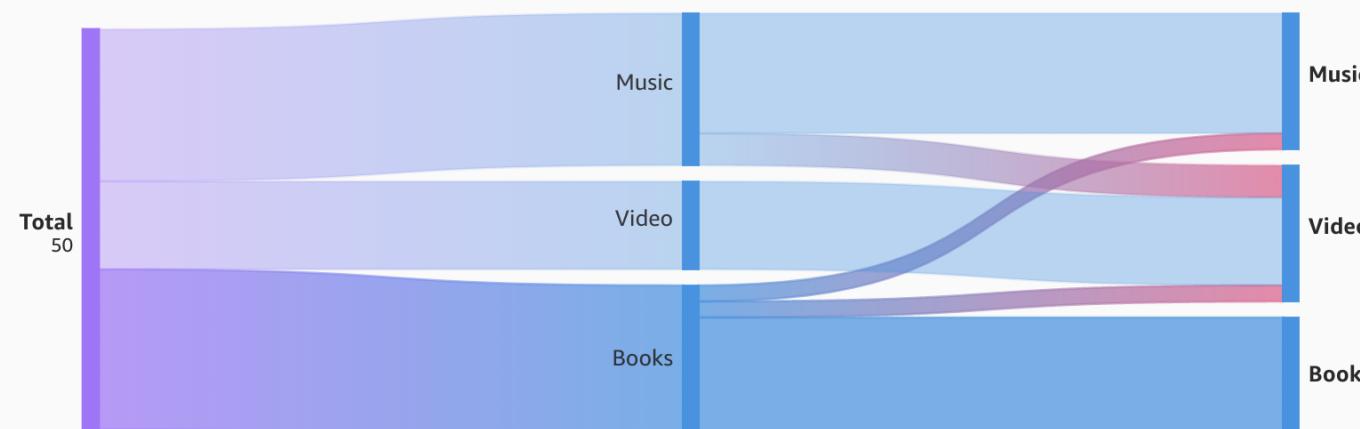
Overview

Scoring

⋮

All predictions

Predicted Category vs. Actual Category



Model accuracy insights

Advanced metrics

Most frequent label

If the model predicts **Books**, it is correct 80% of the time.

For the values that are **Books** in the dataset, the model predicted 100% of them to be **Books**.

Individual labels

Class	Precision	Recall
-------	-----------	--------

Select

Build

Analyze

Predict

Deploy

Model status

86.667%

[Predict](#)[Deploy](#)

The model predicts the correct **Category** 86.667% of the time.

Overview

Scoring

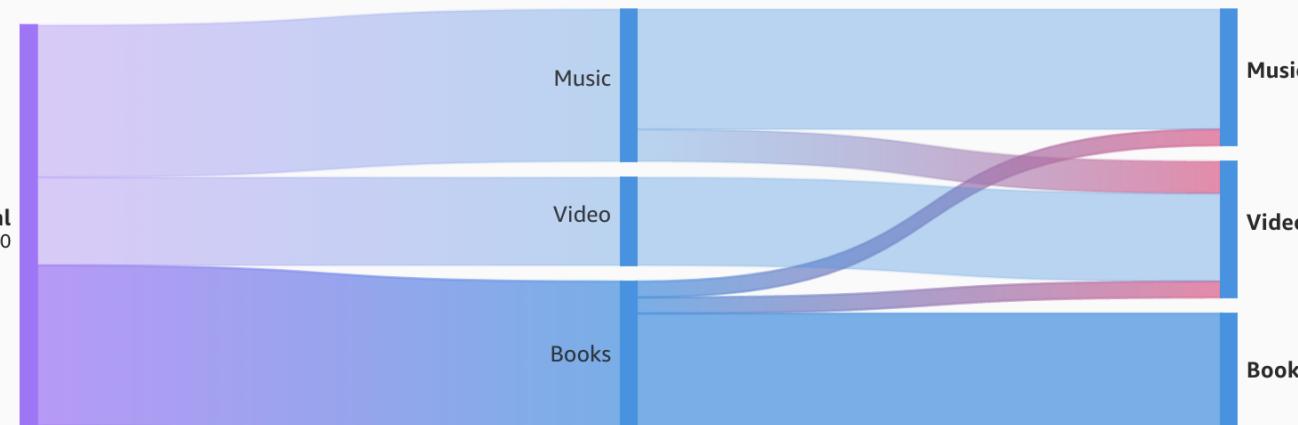
⋮

Predicted Category vs. Actual Category

All predictions

Predicted

Actual

Total
50**Model accuracy insights****Advanced metrics****Most frequent label**

If the model predicts **Books**, it is correct 80% of the time.

For the values that are **Books** in the dataset, the model predicted 100% of them to be **Books**.

Individual labels

Class

Precision

Recall



Advanced metrics

Average f1 ⓘ

83.598%

Average accuracy ⓘ

84%

Average precision ⓘ

86.316%

Average recall ⓘ

84.314%

Class

Books

Predicted values

Books

Music

Video

Actual values

	Books	Music	Video
Books	16	0	0
Music	2	15	0
Video	2	4	11

Precision ⓘ

80%

Recall ⓘ

100%

Accuracy ⓘ

84%

F1 ⓘ

0.889

[Close](#)[Download](#)

Amazon SageMaker Canvas | Domain: QuickSetupDomain- SageMaker Canvas

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/models/Product%20Reviews%20Analysis

My models > Product Reviews Analysis > Version 1

Select Build Analyze Predict Deploy

Run predictions

Single prediction Batch prediction

Use single prediction to get real-time results on the text you enter. The results are the target labels from the model you built.

Text field

Generate predictions

Canvas currently only supports English language. If non-English text is entered, you will get incorrect prediction results.

Enter text to run a prediction.

Prediction results



Prediction results will be displayed here after clicking Generate predictions.

A red arrow points to the "Predict" tab in the top navigation bar.

Possible Data Loss Some features might be lost if you save this workbook in the comma-delimited (.csv) format. To preserve these features, save it in an Excel file format.

Save As...

	A
1	Product_Review
2	I enjoyed Margaret Creighton's book. From far off Yarmouth, Maine, she has thrown her nets far and wide and hauled in a lot of historical flotsam and jetsam that might have escaped other scholars, in service of putting together another of her finely tuned historical studies of the
3	Kevin Kline is the most versatile, multi-talented actor ever. No matter what he does, it's done perfectly. Wish he'd get more parts while we still have him with us. I just love this man!
4	For me, Wolfe's detailing of both the academic and social spheres at Dupont rang true. As a student at a university driven by both scholarly research and the party scene, I can picture many of the novel's more dramatic scenes. Some, like the Saint Ray party toward the beginning o
5	One of the funniest movies of all time!
6	Love this CD!
7	Complete with interviews and behind the scenes footage. Of course the movie itself is probably the best ever. My opinion of course.
8	I must warn potential readers that the vampires in this novella are killers, even the hero (if anyone can call him that). They kill their prey when they feed, so for me they have no redeeming graces no matter how polite, handsome, sexy, etc that they are. I really did not want to rea
9	These VHS were in excellent condition as said. I couldn't be happier ". Enjoying them with my daughter. thanx again..xx
10	I was a little disappointed with this book. Jennifer Weiner is one of my favorite authors but it was hard for me to get past the liberal bias and conservative critisim in this book. Had she left the politics out of the book I would have given it 4 or possibly even 5 stars. I hope in the fut
11	great country album
12	Isabella Zophie Le Cirque de Magique is an excellent book. I would say that it is one of the best books that I have ever read. It is very exciting and I enjoyed the mystery that was in the story. This is one of the most adventurous books that I have ever read. This book is about a ten
13	Dobson begins her easy-to-read book with chapters appropriately titled "Helping Your Child Love Learning" and "Creating Your Own Educational Reform". After reading just these two chapters I was already in love with the book. The remaining chapters consist of reader contribut
14	This CD is surprisingly energetic and intriguing. I really love the 'Try" song and Video.
15	This has always been a favorite movie, but I could only hope to find it on TV occasionally. I am so glad to have found it for sale!
16	Although not quite what I expected, this book was far from being a disappointment. It is not solely focused on women dressed as angels, it is mainly an erotic Fantasy Photography book. 9 photographers from North-central europe are featured, with more than 10 photographs fro
17	ALthough he is correct that the IMF and World Bank can and should play a role, he should also advocate reforming these institutions so that they not only reflect the interest of the dominant capitalist countries. Politics has a role as well, and he must address the inherent contradict
18	Some more usual information for neuropathy sufferers laid out in an easy to understand and follow format. This book in the series does not have so many other personal case histories as the other two publications and was not as useful to me.
19	As other reviewers have noted, this production, which focuses on a fantasy version of Islamic history rather than the religion, is too biased and distorted to be really worthwhile as a history lesson. It's beyond ridiculous. It got one star because there was no option for zero. It does,
20	I saw this at the age of 6 when it came out in 1959. Loved it then and remember it now. Will order a DVD cuz it's just a good flick. Yes I could go into deeply analytical critical reviewing but why kill a good time. "That's the guy we framed! "-- "you're a lucky man.". And there it is
21	This is a part of the Battletech series about the Republic of the Sphere. I liked these names of places: Sirius, Terra Firma, Elgin, Halstead Station (Chicago connection), New Rhodes III, Schedar (instead of Scholar), Woodstock, and Fletcher (Jonathan's friend). There are nine prefect
22	I bought this album simply because it's Kelly Clarkson and I have loved every album that she has put out. This one is probably my least favorite and I think that is because it's a little different then her previous albums. However, that being said, this album has grown on me the more
23	Grant and Twain is a good book, informative, insightful, and concise enough. Mark Perry starts by giving us very good sketches of the lives of the two principals up to the point of the story, including some surprising (for me) details about their personal lives. He then goes into the
24	This book gives a great description of what living with Fibro is like. It helped me not feel so alone with my illness and realize that others do have similiar symptoms. If I had read this book earlier it would have saved me from a needless bladder surgery that did more harm than good
25	Though it has been almost 20yrs since their first cd, it's still hard to not compare any of their projects to that classic. It's still a good cd, but not greatness.
26	Just as great as I remembered. Michael Moore at his best.
27	A+: Fast delivery. I would order from them again. The video was just as described - and great to do!
28	To Love Somebody by The Bee Gees was released in 1967 and charted #17. One of my favorite songs. Fans of The Bee Gees will like this the most.
29	Easy to see why they were so popular. Wanted this one to see a very young Rock Hudson, perhaps his first role.
30	Purchased as a gift and they loved this cd
31	Good movie.
32	one of my favourite marlene's. even tho' she couldn't act, she could 'image'...i respect her as a hard worker and fantasy
33	Prior to reading this book, I didn't think I had major limiting beliefs but the exercises that Cole-Whittaker takes you through helped me uncover some I hadn't even realized I had. If something has kept you from reaching your potential and you can't quite figure out what, pick up th
34	It was a great series!
35	AS DESCRIBED AND SHIPPED QUICK!!! A+++!!!
36	easy read, topical subject matter, leans right yet more mccainsian than bushistic. Takes the reader to exotic locales, providing good escapism.
37	During the reign of Henry VIII, at fourteen Elizabeth Meredith inherited Friarsgate when her mother and older middle sister married and moved onto their respective spouses' estate and her oldest sibling and her husband chose the king's court. Eight years later she remains indepen
38	I've read almost every book written on the Beatles and found Cynthia's story poignant and from the heart. She's had a hard time finding her true self in the shadows of her larger-than-life men and marriages and she persists despite the setbacks and enjoys the adventures. The fi

Select

Build

Analyze

Predict

Deploy

Run predictions

[Single prediction](#)[Batch prediction](#)

Use single prediction to get real-time results on the text you enter. The results are the target labels from the model you built.

Text field

[Generate predictions](#)

i Canvas currently only supports English language. If non-English text is entered, you will get incorrect prediction results.

I must worn potential readers that the vampires in this novella are killers, even the hero (if anyone can call him that). They kill their prey when they feed, so for me they have no redeeming graces no matter how polite, handsome, sexy, etc that they are. I really did not want to read more than the first few pages, but since I spent so much money on this very short novella, I thought I could probably stand to finish it. I found the writing less than spectacular also. The descriptions and scenes seemed to be written in an amateur fashion, so I could not think of the characters as "real." The two main characters fell in love so quickly that I had to read the page again to be sure I had gotten it correct. Nia was ready for Seth to make a move on her before he even came in the door. Others may like this sort of approach, but I need some buildup for the relationship to ring true. While I did like the mixed race content, the rest of it left me cold. Killer vampires are just not my cup of tea and I could care less if they meet their mates and live happily ever after. Just think of how many people over the centuries had their lives cut short so that these vampires could continue their existence. Even Nia's friend Imani is killed in the first three pages of the story. What more can I say.

Prediction results



Prediction results will be displayed here after clicking Generate predictions.



1,313 out of 100,000 characters used.

[Download prediction](#)

Select

Build

Analyze

Predict

Deploy

Run predictions

Single prediction

Batch prediction

Use single prediction to get real-time results on the text you enter. The results are the target labels from the model you built.

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Prediction results

Search labels

Confidence i

Books 99%

Video 1%

Music 0%



1,313 out of 100,000 characters used.



Download prediction

Lab Exercises

- Customer Churn
- Defect Detection
- Text Analysis
- Generative AI
- Information Extraction

The Devpost header features a logo on the left, followed by a navigation bar with links for Product, Hackathons (which is underlined), Projects, Blog, Host a hackathon, a search icon, Log in, and Sign up.

PartyRock_Hackathon

An Amazon Bedrock Playground

Overview My projects Participants (1292) Rules Project gallery Updates Resources & Inspiration Feedback Survey

The PartyRock Generative AI Hackathon by AWS

Learn Generative AI with PartyRock; Make Apps Without Code!

[Join hackathon](#)

Who can participate

- Above legal age of majority in country of residence
- Specific countries/regions excluded

[View full rules](#)

• 38 more days to deadline [View schedule](#)

Deadline

Mar 12, 2024 @ 8:00am GMT+8



Online

Public

\$120,000 in prizes

1292 participants

AWS

Machine Learning/AI

Low/No Code

Beginner Friendly

Managed by Devpost

<https://t.ly/BNxt8>

Hero-Bartender II: The AI Mixologist

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Drink Maker



This app helps you create delicious drinks by inputting ingredients. It knows drink recipes from around the world and can generate pictures.

IngredientOne

Vodka, Gin

IngredientTwo

Cherry, Lime Juice

DrinkInstructions **LLM**

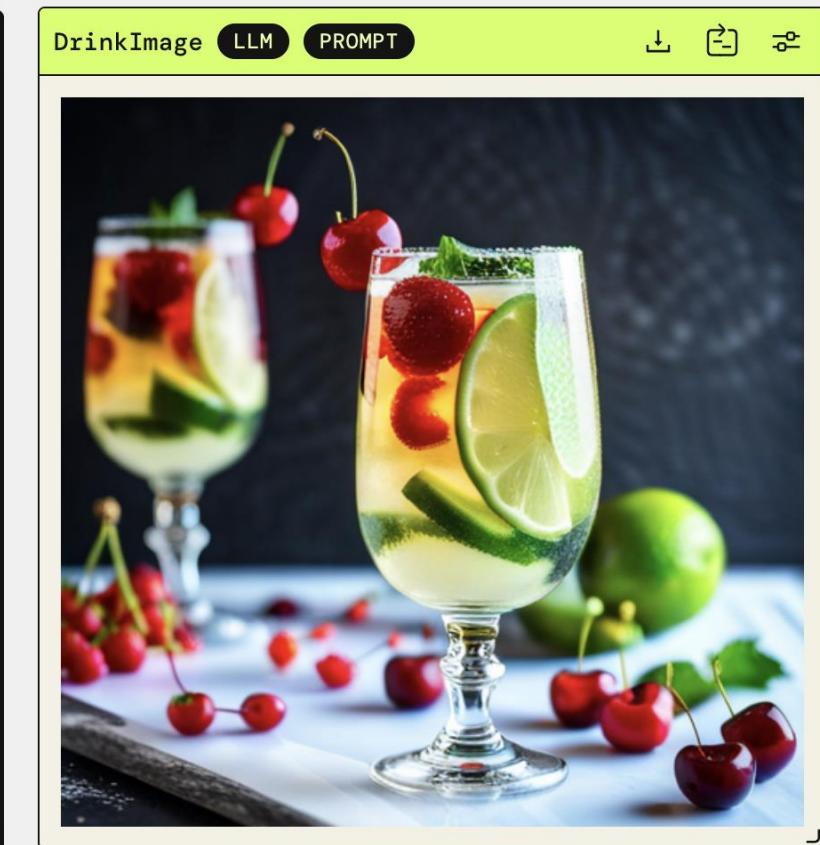
Here is a recipe for a vodka, gin and cherry lime drink:

Ingredients:

- 2 oz vodka
- 1 oz gin
- 1 oz fresh lime juice
- 1/2 oz simple syrup
- 6 maraschino cherries
- Club soda or seltzer
- Ice

Instructions:

1. Fill a cocktail shaker with ice.
2. Add the vodka, gin, lime juice and simple syrup. Shake vigorously for 10-15 seconds.
3. Fill a highball glass with fresh ice.



<https://t.ly/3OdHe>

第 4 期

用

ChatGPT

打造一個有大腦的 LINE Bot 聊天機器人

我們將利用一天的時間快速帶領你進入 ChatGPT 的世界，第一階段從 OpenAI 的申請入門、Python 的 API 串接、簡單的互動開發，到進階的聊天應用。第二階段從 WebAPI 開發入門、LINE Bot 的申請與設定、開發簡易的 LINE Bot 聊天機器人。最後進行跨領域整合，為 LINE Bot 裝上一個擁有 ChatGPT 的大腦！精彩緊湊的課程，從頭到尾絕無冷場，讓你深入體驗一窺人工智慧所建構的未來世界。

- ✓ 本課程適合有 Python 語法開發基礎、API 使用概念的學習者。
- ✓ 提供班級討論群組，並有助教線上服務，確保完成LINE Bot作品。
- ✓ 本課程列入勞動部大人提、小人提補助計畫，獲核可得補助50%-100%。
- ✓ 獨家提供全程課間電腦錄影，將老師的聲音解說及操作步驟錄製起來，供學生免費複習之用，觀看期限為結訓後一個月。
- ✓ 本課程有「保證學會」服務，聽不懂或學不會，一年內免費再來一次。
- ✓ 本課程提供校園優惠 (特價再88折)，[點這裡](#) 索取優惠碼 (詳見下方FAQ)。

上課時間

03/29(五)

9:30~17:30，共 7 小時

上課地點

緯育 TibaMe 台北中心

捷運南京復興站 8 號出口、元大銀

上課費用

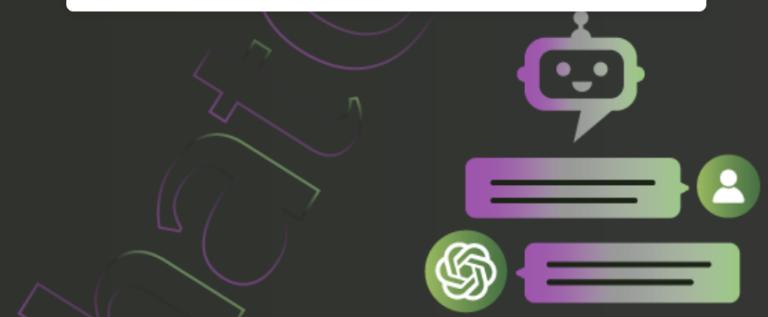
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黃信溢 / 茶米老師

【Python 特訓班】系列暢銷書作者。知名程式設計技術講師(Youtube頻道[▶](#)：茶米老師教室)，擁有豐富的教學經驗，擅長以生動活潑的實作範例，引導學員由淺入深建立紮實技能。



過年後即將調漲課程價格，把握優惠！((T___T))

立即報名

第 4 期

用

Bedrock Claude

打造一個有大腦的 LINE Bot 聊天機器人

我們將利用一天的時間快速帶領你進入 ChatGPT 的世界，第一階段從 OpenAI 的申請入門、Python 的 API 串接、簡單的互動開發，到進階的聊天應用。第二階段從 WebAPI 開發入門、LINE Bot 的申請與設定、開發簡易的 LINE Bot 聊天機器人。最後進行跨領域整合，為 LINE Bot 裝上一個擁有 ChatGPT 的大腦！精彩緊湊的課程，從頭到尾絕無冷場，讓你深入體驗一窺人工智慧所建構的未來世界。

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- ✓ 本課程有「保證學會」服務，聽不懂或學不會，一年內免費再來一次。
- ✓ 本課程提供校園優惠 (特價再88折)，[點這裡](#) 索取優惠碼 (詳見下方FAQ)。

| 上課時間

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| 上課地點

緯育 TibaMe 台北中心

捷運南京復興站 8 號出口、元大銀

| 上課費用

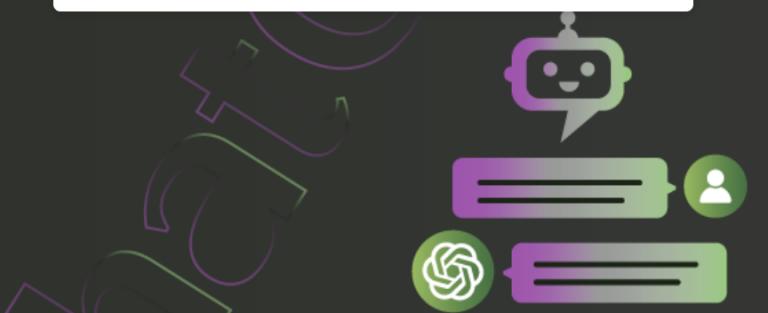
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麥麥老師

【Python 特訓班】系列暢銷書作者。知名程式設計技術講師(Youtube頻道[▶](#)：茶米老師教室)，擁有豐富的教學經驗，擅長以生動活潑的實作範例，引導學員由淺入深建立紮實技能。



過年後即將調漲課程價格，把握優惠！((T___T))

立即報名



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aws workshop studio

Amazon SageMaker Canvas Immersion Day X

Amazon SageMaker Canvas Immersion Day > Generative AI > Introduction to Generative AI with SageMaker Canvas

Introduction to Generative AI with SageMaker Canvas



⚠️ October 2023 - You can stop reading this warning if you're running the lab in your own AWS account. If you're running this lab in Workshop Studio (AWS-provided environment), please be aware that Amazon Bedrock is not currently supported (6 October 2023). Therefore, please run the lab using **Falcon-7B-Instruct** or **MPT-7B-Instruct**. We will remove this warning as soon as Amazon Bedrock become available in Workshop Studio.

SageMaker Canvas chatbot experience allows users to leverage foundation models from Amazon Bedrock and Amazon SageMaker JumpStart in a chatbot UX, without the need to know about Generative AI, APIs, endpoints, tokens, parameters, chat interfaces, etc. The chat interface is pre-built in the SageMaker Canvas app users are already familiar with, in the ready-to-use models tab.

Once launched SageMaker Canvas chatbot experience, users can start interacting with foundation models with the chat interface, asking questions and providing prompts. Users can choose which model they want to interact with, from either Amazon Bedrock (Amazon and partners' models) or Amazon SageMaker JumpStart (open-source models). Users can also compare multiple models at once, to select whichever fits better the style of answers they're looking for.

Access Amazon SageMaker Canvas

In order to access the Amazon SageMaker Canvas chatbot experience, start by accessing Amazon SageMaker Canvas. You can do so by clicking on this [link to the AWS Management Console](#) and click on **Open Canvas** after having selected the right domain and user profile.

Ready-to-use models

 You must have the necessary permissions to make predictions with Ready-to-use models. Go to the [SageMaker Console](#) to enable permissions for this account if this hasn't been done already. If you don't have access to the [SageMaker Console](#), contact your administrator. [Learn more](#) 



New!

Accelerate your productivity using generative AI

Content generation, extraction, summarization, and many more tasks are easier to perform using foundation models from Amazon Bedrock and publicly available models from Amazon SageMaker JumpStart.

 Summarize...

 Write a blog post...

 Explain...

 Brainstorm ideas...

 List key takeaways...

 Improve writing...

 Rewrite...

 Outline...

 Change tone...

 Reply to this...

 Simplify...

 Compare...

 Paraphrase...

Get started now



 Search use case

Last used 

 Grid

 List

Can't find the right model? [Create a custom model](#)

Generative AI using foundation models

Our content generation models can help you craft engaging narratives, articles, answer questions, and more, tailored to your needs.

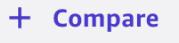


SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL S | +

← → ⌂ d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/readyToUseModels/canvasChat ☆ ⌂ ⌂ ⌂ ⌂ ⌂ New Chrome available :

 Ready-to-use models >  Generate, extract and summarize content Ready-to-use model

 + New chat  Query documents ⓘ

A Claude 2 ▾  

To get started, try these example prompts:

 Create a summary of KPIs (Key Performance Indicators) for monitoring and evaluating the success of a marketing campaign.

 Write a report outlining the potential benefits and ROI of implementing a customer relationship management (CRM) system.

 Compose an email with a summary of the following meeting notes: "Insert your meeting notes"

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AI Claude 2

[+ Compare](#)AI Claude 2
by Anthropica Titan
by AmazonAI Claude Instant
by AnthropicAI21 labs Jurassic-2 Ultra
by AI21 LabsAI21 labs Jurassic-2 Mid
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Ask me anything...



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AI Claude 2 ▾

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To get started, try these

💡 Create a summary
Performance Indi
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success of a mark
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by Meta



💡 Compose an email with a
summary of the following
meeting notes: "Insert your
meeting notes"

[Start up another model](#)

Ask me anything...

Foundation models



Amazon Bedrock Models

These models are always active, and you can start a conversation with them at any time.



Claude 2

by Anthropic



Titan

by Amazon



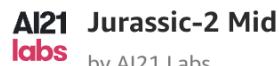
Claude Instant

by Anthropic



AI21 Jurassic-2 Ultra

labs by AI21 Labs



AI21 Jurassic-2 Mid

labs by AI21 Labs



Llama-2-13b-Chat

by Meta



Llama-2-70b-Chat

by Meta



Titan Express

by Amazon



Command Text

by Cohere

Amazon SageMaker JumpStart Models

These are publicly available open-source models in Amazon SageMaker JumpStart. Start them to power your conversation.



Llama-2-7b-Chat

by Meta



Falcon-7B-Instruct

by Technology Innovation Institute



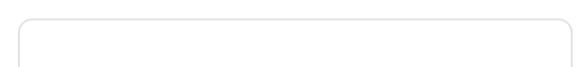
Falcon-40B-Instruct

by Technology Innovation Institute

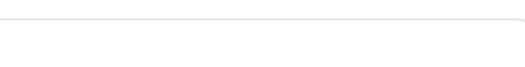


MPT-7B-Instruct

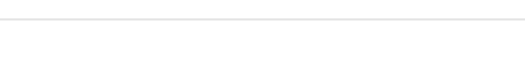
by MosaicML



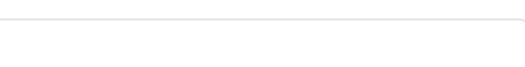
Falcon-7B



Falcon-40B



Dolly-3B-Instruct



Dolly-7B-Instruct



Foundation models



Command Text

by Cohere

Amazon SageMaker JumpStart Models

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Llama-2-7b-Chat

by Meta



Falcon-7B-Instruct

by Technology Innovation Institute



Falcon-40B-Instruct

by Technology Innovation Institute



MPT-7B-Instruct

by MosaicML



Falcon-7B

by Technology Innovation Institute



Falcon-40B

by Technology Innovation Institute



Dolly-3B-Instruct

by Databricks



Dolly-7B-Instruct

by Databricks



Dolly-12B-Instruct

by Databricks



Flan-T5-Large

by Google AI



Flan-T5-XL

by Google AI



MPT-7B

by MosaicML



Foundation models

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Llama-2-7b-Chat

by Meta



Falcon-7B-Instruct

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MPT-7B-Instruct

by MosaicML



Falcon-7B

by Technology Innovation Institute



Falcon-40B

by Technology Innovation Institute



Dolly-3B-Instruct

by Databricks



Dolly-7B-Instruct

by Databricks



Dolly-12B-Instruct

by Databricks



Flan-T5-Large

by Google AI



Falcon-7B-Instruct

by Technology Innovation Institute

About

Falcon 7B Instruct is a 7 billion parameters causal large language model built on Falcon 7B and fine-tuned on a 250 million tokens mixture of chat/instruct datasets. Falcon 7B Instruct is mostly trained on English data, and will not generalize appropriately to other languages. Furthermore, as it is trained on a large-scale corpora representative of the web, it will carry the stereotypes and biases commonly encountered online.

Use of this model is governed by the [Apache 2.0](#) license.

Use cases

Writing creative text formats, translating, answering questions, and generating code. It is specifically designed for taking instructions in a chat format.

Model Developer

[Technology Innovation Institute](#)

Fine-tuning limits

- Max context length: 1024 tokens
- Max dataset size: 10K rows

[Close](#)

[Start up model](#)

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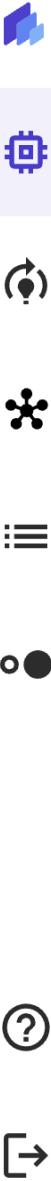
Ready-to-use models > Generate, extract and summarize content Ready-to-use model

+ New chat Query documents ⓘ

A Claude 2 ▾ + Compare

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- Write a report outlining the potential benefits and ROI of implementing a customer relationship management (CRM) system.
- Compose an email with a summary of the following meeting notes: "Insert your meeting notes"



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SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL S | +

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/readyToUseModels/canvasChat

New Chrome available :

Ready-to-use models > Generate, extract and summarize content

Ready-to-use model

+ New chat

Query documents ⓘ

A Claude 2

Configure model

To get started, try these example prompts:

- Create a summary of KPIs (Key Performance Indicators) for monitoring and evaluating the success of a marketing campaign.
- Write a report outlining the potential benefits and ROI of implementing a customer relationship management (CRM) system.
- Compose an email with a summary of the following meeting notes: "Insert your meeting notes"

Temperature ⓘ 0.4

Top K ⓘ 250

Top P ⓘ 0.999

Ready-to-use models

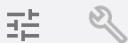
Generate, extract and summarize content

Ready-to-use model

+ New chat

Query documents ⓘ

AI Claude 2



你是小學三年級的學生。請寫一篇關於到台北市動物園玩的作文。字數介於150字到200字之間。

這是一篇關於到台北市動物園玩的作文:

昨天我們全家到台北市動物園玩。進入動物園,首先看到的是長頸鹿區,長頸鹿高高的站在那裡,脖子很長。接著我們去看大象,大象用鼻子噴水玩得很開心。最喜歡的地方是熊貓館,可愛的熊貓吃竹子的樣子讓我看得津津有味。動物園裡還有老虎、狼等很多稀有動物,我都好想近距離看看。雖然一天的時間過得很快,但是我玩得很開心。下次還要再來動物園玩!



Ask me anything...



SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL S | +

← → ⌂ d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/readyToUseModels/canvasChat ☆ ⌂ ⌂ ⌂ ⌂ ⌂ New Chrome available :

Ready-to-use models > Generate, extract and summarize content Ready-to-use model

+ New chat Query documents ⓘ Add another model to compare responses

A Claude 2 + Compare

To get started, try these example prompts:

- Create a summary of KPIs (Key Performance Indicators) for monitoring and evaluating the success of a marketing campaign.**
- Write a report outlining the potential benefits and ROI of implementing a customer relationship management (CRM) system.**
- Compose an email with a summary of the following meeting notes: "Insert your meeting notes"**



SageMaker Canvas | Amazon | Amazon SageMaker Canvas | SageMaker Canvas | T.LY: World's Shortest URL S | +

← → ⌂ d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/readyToUseModels/canvasChat ☆ ⌂ ⌂ ⌂ ⌂ T New Chrome available :

Ready-to-use models > Generate, extract and summarize content Ready-to-use model

+ New chat Query documents ⓘ

A Claude 2 X A Claude Instant X + Compare

To get started, try these example prompts:

- 💡 Create a summary of KPIs (Key Performance Indicators) for monitoring and evaluating the success of a marketing campaign.**
- 💡 Write a report outlining the potential benefits and ROI of implementing a customer relationship management (CRM) system.**
- 💡 Compose an email with a summary of the following meeting notes: "Insert your meeting notes"**

 Ready-to-use models >  Generate, extract and summarize content Ready-to-use model + New chat Query documents A Claude 2  A Claude Instant  

誰是台灣的現任總統？

蔡英文是台灣的現任總統。蔡英文於2016年1月16日就任第14任台灣總統，她是民主進步黨籍人士，也是台灣歷史上第一位女性總統。蔡英文在2016年台灣總統大選中以56%的選票擊敗國民黨候選人朱立倫當選。她的任期從2016年5月20日開始，將任期到2020年5月19日。蔡英文出生於台北市，曾擔任民進黨主席，也曾任職行政院副院長和陸委會主委等職務。她推行親民主和維護台灣主權的立場廣受台灣選民的支持。

台灣現任總統是蔡英文女士。她代表民主進步黨，於2016年1月就任總統，是台灣第一位女性總統。

 Ask me anything...  

Lab Exercises

- Customer Churn
- Defect Detection
- Text Analysis
- Generative AI
- Information Extraction



Canvas from any source

Accelerate Data Preparation
for Machine Learning▶ ML-powered Business
Intelligence - Amazon
QuickSight▶ Operationalize your models -
Automations, Model
deployments, MLOpsCollaborating with Data
Scientists - Sharing to Studio▶ Bring ML models built
anywhere into SageMaker
Canvas

▼ Generative AI

Introduction to Generative AI
with SageMaker CanvasUse Case: Contact Center
Intelligence (CCI)**Information Extraction -
Query your own documents**

Changelog and Updates

▼ Content preferences

Language

English

Information Extraction - Query your own documents

October 2023 - You can stop reading this warning if you're running the lab in your own AWS account. If you're running this lab in Workshop Studio (AWS-provided environment), please be aware that Amazon Bedrock is not currently supported (6 October 2023). Therefore, please run the lab using **Falcon-7B-Instruct** or **MPT-7B-Instruct**. We will remove this warning as soon as Amazon Bedrock become available in Workshop Studio.

If you haven't done so, please follow the previous lab to cover the main capabilities of the SageMaker Canvas chatbot experience. Come back to this lab once you're ready.

Agenda

1. [Introduction](#)
2. [The dataset](#)
3. [Querying your documents](#)
4. [\(Optional\) What if I wanted to use my own documents?](#)

Introduction

SageMaker Canvas lets users ask questions or have conversations and get responses that are grounded in their enterprise's data. Ensuring the results they get back are specific to their context and not some generic replies. This release makes it possible to connect Canvas directly to your existing knowledge-bases or upload new knowledge as/when required and be able to perform conversation-AI in a friction-less manner.



Ready-to-use models



 You must have the necessary permissions to make predictions with Ready-to-use models. Go to the [SageMaker Console](#) to enable permissions for this account if this hasn't been done already. If you don't have access to the [SageMaker Console](#), contact your administrator. [Learn more](#) 



New!



Accelerate your productivity using generative AI



Content generation, extraction, summarization, and many more tasks are easier to perform using foundation models from Amazon Bedrock and publicly available models from Amazon SageMaker JumpStart.



 Summarize...

 Write a blog post...

 Explain...

 Brainstorm ideas...

 List key takeaways...

 Improve writing...

 Rewrite...

 Outline...

 Change tone...

 Reply to this...

 Simplify...

 Compare...

 Paraphrase...

Get started now



 Search use case

Last used 

 Grid

 List



Can't find the right model? [Create a custom model](#)



Generative AI using foundation models



Our content generation models can help you craft engaging narratives, articles, answer questions, and more, tailored to your needs.



Amazon SageMaker Canvas | Domain: QuickSetupDomain- SageMaker Canvas +

d-culcm7zcqhoq.studio.us-east-1.sagemaker.aws/canvas/default/readyToUseModels/canvasChat

Ready-to-use models > Generate, extract and summarize content Ready-to-use model

+ New chat Query documents ⓘ Index kb-4-sagemaker-canvas ▾

A Claude 2

+ Compare

Ask me anything

The image shows the SageMaker Canvas interface for generating, extracting, and summarizing content. A red arrow highlights the 'Query documents' toggle switch, indicating it is active. The interface includes a sidebar with various icons and a main area for interacting with AI models like Claude 2.

- Canvas from any source
- Accelerate Data Preparation for Machine Learning
- ▶ ML-powered Business Intelligence - Amazon QuickSight
- ▶ Operationalize your models - Automations, Model deployments, MLOps
- Collaborating with Data Scientists - Sharing to Studio
- ▶ Bring ML models built anywhere into SageMaker Canvas

▼ Generative AI

- Introduction to Generative AI with SageMaker Canvas
- Use Case: Contact Center Intelligence (CCI)
- Information Extraction - Query your own documents**
- 🚀 Changelog and Updates

▼ Content preferences

Language

English

Generative AI-powered foundation models

Our content generation models can help you craft engaging narratives, articles, answer questions, and more, tailored to your needs.

Generate, extract and summarize content

New

Powered by Amazon Bedrock and publicly available models

Additional ready-to-use models

Our ready-to-use content extraction models can quickly distill insights from text, image, and document data.

Filter by data type: Text Image Document

Document queries

New

Extract information from structured documents such as paystubs, bank statements, W-2s, and mortgage application forms by asking questions using natural language.

Powered by Amazon Textract

Sentiment analysis

Detect sentiment in lines of text, which can be positive, negative, neutral, or mixed.

Powered by Amazon Comprehend

Once there, select the model(s) that you want to use for this experiment. We will start with **Anthropic Claude 2**. To query your Amazon Kendra index, make sure that the toggle "Query documents" is activated, and select the index among the list of available indices.

In environments provided by AWS instructors, use **CanvasImmersionDayIndex** as the index to query.

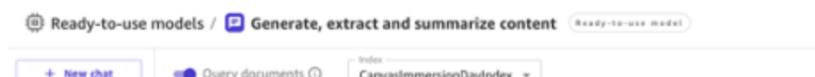
Once the index is selected, you can go ahead and start asking questions. Here is an example query:

What do I do if my L Series type C double acting actuator is leaking?

Copied!



For the questions asked, the chat will show the answer generated by the foundation model, along with the source documents that contributed to generating the answer. When clicking any of the source documents, SageMaker Canvas opens a preview of the document, highlighting the excerpt used by the foundation model.



+ New chat

Query documents ⓘ

Index

kb-4-sagemaker-canvas

A Claude 2



+ Compare

What do I do if my L Series type C double acting actuator is leaking?

1+



Ready-to-use models

Generate, extract and summarize content

Ready-to-use model

+ New chat

Query documents ⓘ

Index

kb-4-sagemaker-canvas

A Claude 2



What do I do if my L Series type C double acting actuator is leaking?



Based on the excerpts provided, here are some steps to take if your L Series type C double acting actuator is leaking:

- Inspect and replace the piston o-ring and wiper ring if needed. Be sure to lubricate new o-rings with the approved lubricant.
- Inspect the piston for corrosion or wear. Excessive corrosion or wear may require replacing actuator components.
- Lubricate the internal cylinder surface with approved lubricant and reinstall the cylinder over the piston carefully to avoid pinching the o-ring.
- Inspect and replace the rod seals and bushings if needed.
- Check for damage to the internal cylinder surface, as this can affect the piston's sealing ability. The cylinder may need to be replaced if damaged.
- Use only approved replacement parts from QTRCO. Generic parts may not seal properly.
- Follow the maintenance instructions in the QTRCO documentation to properly disassemble, inspect, replace seals, lubricate, and

Ask me anything...



The screenshot shows the Amazon SageMaker Canvas interface. The top navigation bar includes tabs for "Amazon SageMaker Canvas" and "SageMaker Canvas". The main page title is "Generate, extract and summarize content". A sidebar on the left contains various icons for different features like "New chat", "Query documents", "Index", "Source", "Index", "Source", and "Ask me anything".

Ready-to-use models > Generate, extract and summarize content

Ready-to-use model

+ New chat

Query documents (i)

Index: kb-4-sagemaker-canvas

A Claude 2

Content:

- Inspect and replace the rod seals and bushings if needed.
- Check for damage to the internal cylinder surface, as this can affect the piston's sealing ability. The cylinder may need to be replaced if damaged.
- Use only approved replacement parts from QTRCO. Generic parts may not seal properly.
- Follow the maintenance instructions in the QTRCO documentation to properly disassemble, inspect, replace seals, lubricate, and reassemble the actuator.

Let me know if you need any clarification on these steps to stop the leaking on your L Series type C actuator. The QTRCO manuals provide more detailed maintenance procedures.

Source

1. DCN00669(1)_QTRCO_IOM_L... 2. DCN00677(1)_QTRCO_IOM_L... 3. DCN00669(1)_QTRCO_IOM_L... 4. DCN00669(1)_QTRCO_IOM_L...
5. DCN04081(1)_QTRCO_IOM_D...

Index

kb-4-sagemaker-canvas

Ask me anything

+ New chat

Query documents ⓘ

Index

kb-4-sagemaker-canvas

DCN00669(1)_QTRCO_IOM_LDA_typeC.pdf



A Claude 2


Install-Operate-Maintain
L Series type-C Double Acting Actuators


7. Inspect the piston for any corrosion or wear (pitting, cracking). If excessive corrosion or wear is apparent a new actuator or actuator components may be necessary.
8. Lubricate the internal surface of the cylinder with a light coat of the correct QTRCO approved lubricant and slide the cylinder back over the piston and into the cylinder seal groove of the base plate, taking care not to pinch the piston o-ring.
9. Place the end cap back over the tie rods. Be sure that the cylinder is seated in the cylinder seal groove of the end cap with the cylinder seal still in place between the cylinder and the end cap.
10. Secure the end cap with the tie rod hex nuts removed in step two. Hand tighten, and then torque the hex nuts to half and then full values according to the table below using the pattern designated.

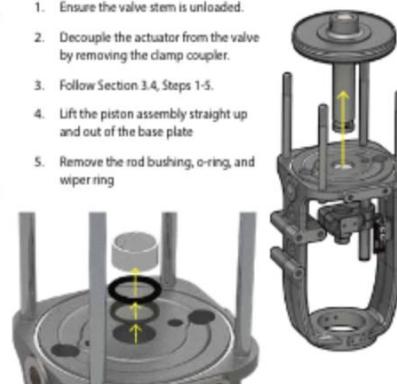
MODEL	LB* FT	Nm
LD4	10	14
LD6	20	27
LD8	35	48
L10	35	48
L12	35	48
L14	56	76
L16	56	76
L20	58	79
L24	87	118



11. Reset the travel stop
12. Leak Test
13. Reinstate the actuator to service

3.5 ROD SEAL AND BUSHING REPLACEMENT

1. Ensure the valve stem is unloaded.
2. Decouple the actuator from the valve by removing the clamp coupler.
3. Follow Section 3.4, Steps 1-5.
4. Lift the piston assembly straight up and out of the base plate
5. Remove the rod bushing, o-ring, and wiper ring



6. Clean the bushing and o-ring grooves of any contaminants.
7. Replace the rod bushing, o-ring, and wiper ring
8. Fill the remaining space in the grooves with the proper QTRCO approved lubricant.
9. Clean the output rod, inspect for wear or damage, and replace if necessary.
10. Lower the piston assembly back into the baseplate.
11. Lubricate the internal surface of the cylinder with a light coat of the correct QTRCO approved lubricant and slide the cylinder back over the piston and into the cylinder seal groove of the base plate, taking care not to pinch the piston o-ring.
12. Place the end cap back over the tie rods. Be sure that the cylinder is seated in the cylinder seal groove of the end cap with the cylinder seal still in place between the cylinder and the end cap.

- Lubricate the internal cylinder surface with approved lubricant and reinstall the cylinder over the piston carefully to avoid pinching the o-ring.
- Inspect and replace the rod seals and bushings if needed.
- Check for damage to the internal cylinder surface, as this can affect the piston's sealing ability. The cylinder may need to be replaced if damaged.
- Use only approved replacement parts from QTRCO. Generic parts may not seal properly.
- Follow the maintenance instructions in the QTRCO documentation to properly disassemble, inspect, replace seals, lubricate, and reassemble the actuator.

Let me know if you need any clarification on these steps to stop the leaking on your L Series type C actuator. The QTRCO manuals provide more detailed maintenance procedures.

Source

1. DCN00669(1)_QTRCO_IOM_L...
2. DCN00677(1)_QTRCO_IOM_L...
3. DCN00669(1)_QTRCO_IOM_L...
4. DCN00669(1)_QTRCO_IOM_L...

Index

Ask me anything...



[+ New chat](#)

Query documents ⓘ

Index

kb-4-sagemaker-canvas

Claude 2



Jurassic-2 Mid



Titan



What do I do if my L Series type C double acting actuator is leaking?

Based on the excerpts provided, here are a few things you can do if your L Series type C double acting actuator is leaking:

- Replace the piston o-ring and wiper ring. Be sure to lubricate new o-rings and wiper rings with the approved QTRCO lubricant.
- Inspect the piston for corrosion or wear. If excessive, a new actuator or components may be necessary.
- Lubricate the internal surface of the cylinder with approved QTRCO lubricant before reassembling.
- Make sure the cylinder is properly seated in the seal groove when reassembling the end cap.
- Check other seals like the rod seals and bushings. Replace if worn.
- Follow the maintenance instructions provided in the L Series type C manual for proper disassembly, inspection,

If your L Series type C double acting actuator is leaking, you may need to inspect the piston for any corrosion or wear (pitting, cracking). If excessive corrosion or wear is apparent, you may need to replace the actuator or actuator components.

Source

1. DCN00669(1)_QTRCO_IOM_L...
2. DCN00677(1)_QTRCO_IOM_L...

Index

kb-4-sagemaker-canvas

Lubricate the internal surface of the cylinder with a light coat of the correct QTRCO approved lubricant and slide the cylinder back over the piston and into the cylinder seal groove of the base plate, taking care not to pinch the piston o-ring.

Source

1. DCN00669(1)_QTRCO_IOM_L...
2. DCN00677(1)_QTRCO_IOM_L...

Index

kb-4-sagemaker-canvas

Ask me anything...



Thank you!

Michael Lin

linmicht@amazon.com

