

Please follow our [blog](#) to see more information about new features, tips and tricks, and featured notebooks such as [Analyzing a Bank Failure with Colab](#).

2025-04-09

- Colab Data Science Agent [launched!](#)
- Julia language runtimes available with GPU and TPU support [GitHub](#).
- Now your popular Kaggle datasets are cached for quick retrieval.
- Upgraded Colab runtimes to Python 3.11.

Python package upgrades

- bigframes 1.29.0 -> 1.42.0
- TensorFlow 2.17.1 -> 2.18.0
- tensorboard 2.17.1 -> 2.18.0
- keras 3.5.0 -> 3.8.0
- torch 2.5.1 -> 2.6.0
- torchaudio 2.5.1 -> 2.6.0
- torchvision 0.20.1 -> 0.21.0
- fastai 2.7.18 -> 2.7.19
- ipykernel 5.5.6 -> 6.17.1
- google-genai 0.3.0 -> 1.9.0
- google-auth 2.27.0 -> 2.38.0
- Tornado 6.3.3 -> 6.4.2
- jax 0.4.33 -> 0.5.2
- accelerate 1.2.1 -> 1.5.2
- transformers 4.47.1 -> 4.50.3
- openai 1.57.4 -> 1.70.0
- kagglehub 0.3.6 -> 0.3.11
- earthengine-api 1.4.3 -> 1.5.9
- google-cloud-bigquery 3.29.0 -> 3.31.0
- bigquery-magics 0.8.1 -> 0.9.0
- NumPy 1.26.4 -> 2.0.2

Python package inclusions

- cuml-cu12 24.12.0

2025-01-13

- Released version 1.2.0 of the [\(Open in Colab Chrome Extension\)](#).
- Released minimizable comments with indicators next to cell.
- TPU v5e-1 Runtimes are now available for selection [\(tweet\)](#).
- GPU prices were decreased [\(tweet\)](#).

Python package upgrades

- accelerate 1.1.1 -> 1.2.1
- aiohttp 3.10.10 -> 3.11.11
- altair 4.2.2 -> 5.5.0
- bigframes 1.25.0 -> 1.29.0
- cmake 3.30.5 -> 3.31.2
- cvxpy 1.5.3 -> 3.6.0
- earthengine-api 1.2.0 -> 1.4.3
- folium 0.18.0 -> 0.19.3
- holidays 0.60 -> 0.63
- huggingface-hub 0.26.2 -> 0.27.0
- jsonpickle 3.4.2 -> 4.0.1
- kagglehub 0.3.3 -> 0.3.6
- keras 3.4.1 -> 3.5.0
- matplotlib 3.8.0 -> 3.10.0
- openai 1.54.3 -> 1.57.4
- pymc 5.18.0 -> 5.19.1
- safetensors 0.4.5 -> 0.5.0
- scikit-image 0.24.0 -> 0.25.0
- scikit-learn 1.5.2 -> 1.6.0
- sentence-transformers 3.2.1 -> 3.3.1
- tensorflow 2.17.0 -> 2.17.1
- torch 2.5.0 -> 2.5.1
- torchaudio 2.5.0 -> 2.5.1
- torchvision 0.20.0 -> 0.20.1

```
# Sentiment Analysis Pipeline for Social Media Data

import pandas as pd
import numpy as np
import re
import string
import seaborn as sns
import matplotlib.pyplot as plt
from wordcloud import WordCloud
from sklearn.model_selection import train_test_split
from sklearn.feature_extraction.text import TfidfVectorizer
from sklearn.linear_model import LogisticRegression
from sklearn.metrics import classification_report, confusion_matrix
from nltk.corpus import stopwords
from nltk.stem import WordNetLemmatizer
import nltk

nltk.download('stopwords')
nltk.download('wordnet')

# Load data
file_path = "test.csv"
df = pd.read_csv(file_path, header=None, quoting=1, on_bad_lines='skip')
df.columns = ['text', 'author', 'metadata']

# Drop rows with null text
df = df.dropna(subset=['text'])

# Data Preprocessing
def clean_text(text):
    text = text.lower()
    text = re.sub(r'http\S+|www\S+|https\S+', '', text, flags=re.MULTILINE)
    text = re.sub(r'@\w+|\#','', text) # remove mentions and hashtags
    text = re.sub(r'^A-Za-z\s', '', text) # remove punctuations
    text = re.sub(r'\s+', ' ', text).strip() # remove extra whitespace
    return text

df['clean_text'] = df['text'].apply(clean_text)

# Tokenization and Lemmatization
stop_words = set(stopwords.words('english'))
lemmatizer = WordNetLemmatizer()

def preprocess(text):
    tokens = text.split()
    tokens = [lemmatizer.lemmatize(word) for word in tokens if word not in stop_words]
    return " ".join(tokens)

df['processed_text'] = df['clean_text'].apply(preprocess)

# For demonstration: generate synthetic sentiment labels (in real case,
df['sentiment'] = np.random.choice(['positive', 'neutral', 'negative'],

# EDA: Plot label distribution
sns.countplot(data=df, x='sentiment')
plt.title('Sentiment Distribution')
plt.show()

# Word cloud
text_combined = " ".join(df['processed_text'])
wordcloud = WordCloud(width=800, height=400).generate(text_combined)
plt.figure(figsize=(10,5))
plt.imshow(wordcloud, interpolation='bilinear')
plt.axis("off")
plt.title('Word Cloud')
plt.show()

# Feature Engineering
vectorizer = TfidfVectorizer(max_features=5000)
```

```

vectorizer = TfidfVectorizer(max_features=5000)
X = vectorizer.fit_transform(df['processed_text'])
y = df['sentiment']

# Model Training
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2)
model = LogisticRegression(max_iter=1000)
model.fit(X_train, y_train)

# Evaluation
y_pred = model.predict(X_test)
print(confusion_matrix(y_test, y_pred))
print(classification_report(y_test, y_pred))
print(df)
df.head()

!pip install gradio==3.38.0

import gradio as gr

def predict_sentiment(text):
    inputs = tokenizer(text, return_tensors="pt").to(model.device)
    outputs = model(**inputs)
    predictions = torch.nn.functional.softmax(outputs.logits, dim=-1)
    predicted_class = torch.argmax(predictions).item()

    # Assuming your labels are in a list called 'labels'
    labels = dataset['train'].features['label'].names
    predicted_label = labels[predicted_class]

    return predicted_label

iface = gr.Interface(
    fn=predict_sentiment,
    inputs=gr.inputs.Textbox(lines=2, placeholder="Enter text here."),
    outputs="text",
    title="Sentiment Analysis",
    description="Enter text to analyze its sentiment."
)

iface.launch()

```

- transformers 4.46.2 -> 4.47.1
- wandb 0.18.6 -> 0.19.1
- xarray 2024.10.0 -> 2024.11.0

Python package inclusions

- google-genai 0.3.0

2024-11-11

- Users can now import Gemini API keys from AI Studio into their user secrets, all in Colab [\(tweet\)](#).
- Increased limit to 1000 characters for requests to Gemini in Chat and Generate windows.
- Improved saving notebook to GitHub flow.
- Updated Gemini spark icon to be colorful.
- [uv](#) is pre-installed on the PATH for faster package installs.
- Fixed bugs
 - Dropdown text for GitHub repository not visible [#4901](#).
 - Pre-installed California housing dataset README not correct [#4862](#).
 - Backend execution error for scheduled notebook [#4850](#).
 - Drive File Stream issues [#3441](#).
 - Linking to the signup page does not preserve the authuser parameter.
 - Error messages in Gemini chat are not polished.
 - Clicking in Gemini chat feedback causes jitters the UI.
 - Hovering over a table of contents entry would show the menu icons for all entries.
 - Surveys display over open dialogs.
 - Playground mode banner not shown on mobile.

Python package upgrades

- accelerate 0.34.2 -> 1.1.1
- arviz 0.19.0 -> 0.20.0
- bigframes 1.18.0 -> 1.25.0
- bigquery-magics 0.2.0 -> 0.4.0
- bokeh 3.4.3 -> 3.6.1
- blosc 2.0.0 -> 2.7.1
- cloudpickle 2.2.1 -> 3.1.0
- cudf-cu12 24.4.1 -> 24.10.1
- dask 2024.8.0 -> 24.10.0
- debugpy 1.6.6 -> 1.8.0
- earthengine-api 1.0.0 -> 1.2.0
- folium 0.17.0 -> 0.18.0
- gscfs 2024.6.1 -> 2024.10.0
- geemap 0.34.3 -> 0.35.1
- holidays 0.57 -> 0.60
- huggingface-hub 0.24.7 -> 0.26.2
- kagglehub 0.3.0 -> 0.3.3
- lightgbm 4.4.0 -> 4.5.0
- lxml 4.9.4 -> 5.3.0
- matplotlib 3.7.1 -> 3.8.0
- mizani 0.11.4 -> 0.13.0
- networkx 3.3 -> 3.4.2
- nltk 3.8.1 -> 3.9.1
- pandas 2.1.4 -> 2.2.2
- pillow 10.4.0 -> 11.0.0
- plotnine 0.13.6 -> 0.14.1
- polars 1.6.0 -> 1.9.0
- protobuf 3.20.3 -> 4.25.5
- pyarrow 14.0.2 -> 17.0.0
- pydrive2 1.20.0 -> 1.21.1
- pymc 5.16.2 -> 5.18.0
- torch 2.4.1 -> 2.5.0
- torchaudio 2.4.1 -> 2.5.0
- torchvision 0.19.1 -> 0.20.0
- transformers 4.44.2 -> 4.46.2
- xarray 2024.9.0 -> 2024.10.0

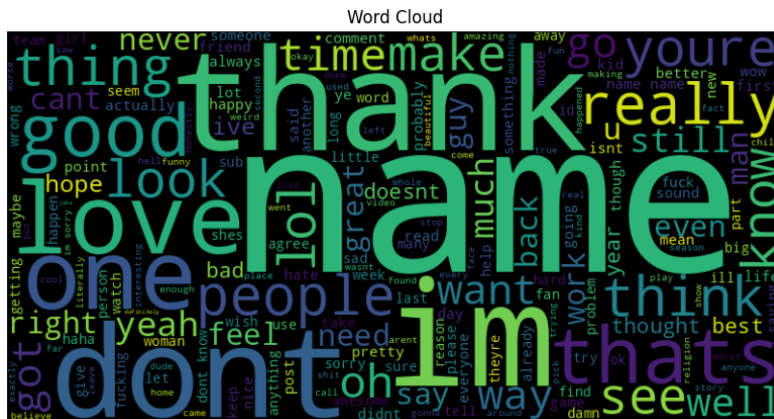
- diffusers 0.31.0
- gitpython 3.1.43
- langchain 0.3.7
- openai 1.54.3
- pygit2 1.16.0
- pyspark 3.5.3
- sentence-transformers 3.2.1
- timm 1.0.11
- wandb 0.18.6

- drivefs upgraded from 89.0.2 to 98.0.0

- Improved code snippet search
- Updated Marketplace image and public local runtime container
- Improved the look-and-feel of interactive form dropdowns and checkboxes
- Fixed bugs
 - activating the skip link caused the notebook to scroll out of view
 - toggling a checkbox too much caused the page to crash
 - lightning fast drags could cause orphaned tabs
 - custom widgets snippet would show for local runtimes

- accelerate 0.32.1 -> 0.34.2
- arviz 0.18.0 -> 0.19
- autograd 1.6.2 -> 1.7.0
- bigframes 1.14.0 -> 1.18.0
- dask 2024.7.1 -> 2024.8.0
- distributed 2024.7.1 -> 2024.8.0
- duckdb 0.10.3 -> 1.1.0
- earthengine-api 0.1.416 -> 1.0.0
- flax 0.8.4 -> 0.8.5
- gdown 5.1.0 -> 5.2.0
- geemap 0.33.1 -> 0.34.3
- geopandas 0.14.4 -> 1.0.1
- google-cloud-aiplatform 1.59.0 -> 1.67.1
- google-cloud-bigquery-storage 2.25.0 -> 2.26.0
- holidays 0.54 -> 0.57
- huggingface-hub 0.23.5 -> 0.24.7
- ibis-framework 8.0.0 -> 9.2.0
- jax 0.4.26 -> 0.4.33
- jaxlib 0.4.26 -> 0.4.33
- kagglehub 0.2.9 -> 0.3.0
- lightgbm 4.4.0 -> 4.5.0
- matplotlib-venn 0.11.10 -> 1.1.1
- mizani 0.9.3 -> 0.11.4
- Pillow 9.4.0 -> 10.4.0
- plotly 5.15.0 -> 5.24.1
- plotnine 0.12.4 -> 0.13.6
- polars 0.20.2 -> 1.6.0
- progressbar2 4.2.0 -> 4.5.0
- PyDrive2 1.6.3 -> 1.20.0
- pymc 5.10.4 -> 5.16.2
- pytensor 2.18.6 -> 2.25.4
- scikit-image 0.23.2 -> 0.24.0
- scikit-learn 1.3.2 -> 1.5.2
- torch 2.3.1 -> 2.4.1
- torchaudio 2.3.1 -> 2.4.1
- torchvision 0.18.1 -> 0.19.1
- transformers 4.42.4 -> 4.44.2
- urllib3 2.0.7 -> 2.2.3
- xarray 2024.6.0 -> 2024.9.0

2024-08-20



	precision	recall	f1-score	support
negative	0.35	0.37	0.36	385
neutral	0.29	0.31	0.30	353
positive	0.30	0.25	0.27	328
accuracy			0.31	1066
macro avg	0.31	0.31	0.31	1066
weighted avg	0.31	0.31	0.31	1066

3/19

```

5325
5326
5327

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                                metadata \
0      and Scarlett!\t25\teecwqtt
1                                NaN
2                                NaN
3                                NaN
4                                NaN
...                               ...
5323                               NaN
5324                               NaN
5325                               NaN
5326                               NaN
5327                               NaN

```

```

                                clean_text \
0      im really sorry about your situation although ...
1      its wonderful because its awful at not with edfd
2                                kings fan here
3                                i didnt know that
4      they got bored from haunting earth for thousan...
...                               ...
5323  thanks i was diagnosed with bp after the hospi...
5324                                well that makes sense efcs
5325                                daddy issues name efbiugo
5326  so glad i discovered that subreddit a couple m...
5327  had to watch elmo in grouchland one time too m...

```

```

                                processed_text sentiment
0      im really sorry situation although love name s...  neutral
1                                wonderful awful edfd  positive
2                                king fan  neutral
3                                didnt know  negative
4      got bored haunting earth thousand year ultimat...  negative
...                               ...
5323  thanks diagnosed bp hospitalization well efceasc  positive
5324                                well make sense efcs  negative
5325                                daddy issue name efbiugo  negative
5326  glad discovered subreddit couple month ago goo...  neutral
5327  watch elmo grouchland one time many kid little...  neutral

```

[5327 rows x 6 columns]

Collecting gradio==3.38.0

Downloading gradio-3.38.0-py3-none-any.whl.metadata (17 kB)

Collecting aiofiles<24.0,>=22.0 (from gradio==3.38.0)

Downloading aiofiles-23.2.1-py3-none-any.whl.metadata (9.7 kB)

Requirement already satisfied: aiohttp<=3.0 in /usr/local/lib/python

Requirement already satisfied: altair<6.0,>=4.2.0 in /usr/local/li

Collecting fastapi (from gradio==3.38.0)

Downloading fastapi-0.115.12-py3-none-any.whl.metadata (27 kB)

Collecting ffmpeg (from gradio==3.38.0)

Downloading ffmpeg-0.5.0-py3-none-any.whl.metadata (3.0 kB)

Collecting gradio-client<=0.2.10 (from gradio==3.38.0)

Downloading gradio_client-1.10.0-py3-none-any.whl.metadata (7.1

Requirement already satisfied: httpx in /usr/local/lib/python3.11/

Requirement already satisfied: huggingface-hub<=0.14.0 in /usr/loc

Requirement already satisfied: jinja2<4.0 in /usr/local/lib/pythor

Requirement already satisfied: markdown-it-py<=2.0.0 in /usr/local

Collecting markupsafe<=2.0 (from gradio==3.38.0)

Downloading MarkupSafe-2.1.5-cp311-cp311-manylinux_2_17_x86_64.m

Requirement already satisfied: matplotlib<=3.0 in /usr/local/lib/p

Collecting mdit-py-plugins<=0.3.3 (from gradio==3.38.0)

Downloading mdit_py_plugins-0.3.3-py3-none-any.whl.metadata (2.8

Collecting numpy<=1.0 (from gradio==3.38.0)

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61.0/61.0 kB 3.3 MB/

Requirement already satisfied: orjson<=3.0 in /usr/local/lib/pythc

Requirement already satisfied: packaging in /usr/local/lib/python3

Requirement already satisfied: pandas<3.0,>=1.0 in /usr/local/lib/

Collecting pillow<11.0,>=8.0 (from gradio==3.38.0)

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Requirement already satisfied: pydantic!=1.8,!1.8.1,!2.0.0,!2.0

Collecting pydub (from gradio==3.38.0)

Downloading pydub-0.25.1-py2.py3-none-any.whl.metadata (1.4 kB)

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Collecting python-multipart (from gradio==3.38.0)
  Downloading python_multipart-0.0.20-py3-none-any.whl.metadata (1
Requirement already satisfied: pyyaml<7.0,>=5.0 in /usr/local/lib/
Requirement already satisfied: requests~=2.0 in /usr/local/lib/pyt
Collecting semantic-version~=2.0 (from gradio==3.38.0)
  Downloading semantic_version-2.10.0-py2.py3-none-any.whl.metadat
Requirement already satisfied: typing-extensions~=4.0 in /usr/loca
Collecting uvicorn>=0.14.0 (from gradio==3.38.0)
  Downloading uvicorn-0.34.2-py3-none-any.whl.metadata (6.5 kB)
Collecting websockets<12.0,>=10.0 (from gradio==3.38.0)
  Downloading websockets-11.0.3-cp311-cp311-manylinux_2_5_x86_64.m
Requirement already satisfied: aiohappyeyeballs>=2.3.0 in /usr/loc
Requirement already satisfied: aiosignal>=1.1.2 in /usr/local/lib/
Requirement already satisfied: attrs>=17.3.0 in /usr/local/lib/pyt
Requirement already satisfied: frozenlist>=1.1.1 in /usr/local/lib/
Requirement already satisfied: multidict<7.0,>=4.5 in /usr/local/lib/
Requirement already satisfied: propcache>=0.2.0 in /usr/local/lib/
Requirement already satisfied: yarl<2.0,>=1.17.0 in /usr/local/lib/
Requirement already satisfied: jsonschema>=3.0 in /usr/local/lib/p
Requirement already satisfied: narwhals>=1.14.2 in /usr/local/lib/
Requirement already satisfied: fsspec in /usr/local/lib/python3.11
Requirement already satisfied: anyio in /usr/local/lib/python3.11/
Requirement already satisfied: certifi in /usr/local/lib/python3.1
Requirement already satisfied: httpcore==1.* in /usr/local/lib/pyt
Requirement already satisfied: idna in /usr/local/lib/python3.11/c
Requirement already satisfied: h11>=0.16 in /usr/local/lib/python3
Requirement already satisfied: filelock in /usr/local/lib/python3.
Requirement already satisfied: tqdm>=4.42.1 in /usr/local/lib/pyth
Requirement already satisfied: hf-xet<2.0.0,>=1.1.0 in /usr/local/
Requirement already satisfied: mdurl~=0.1 in /usr/local/lib/python
Requirement already satisfied: linkify-it-py<3,>=1 in /usr/local/lib/
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/
Requirement already satisfied: cycycler>=0.10 in /usr/local/lib/pyth
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/
Requirement already satisfied: kiwisolver>=1.3.1 in /usr/local/lib/
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/
Requirement already satisfied: python-dateutil>=2.7 in /usr/local/
INFO: pip is looking at multiple versions of mdit-py-plugins to de
Collecting mdit-py-plugins<=0.3.3 (from gradio==3.38.0)
  Downloading mdit_py_plugins-0.3.2-py3-none-any.whl.metadata (2.8
  Downloading mdit_py_plugins-0.3.1-py3-none-any.whl.metadata (2.8
  Downloading mdit_py_plugins-0.3.0-py3-none-any.whl.metadata (2.8
  Downloading mdit_py_plugins-0.2.8-py3-none-any.whl.metadata (2.8
  Downloading mdit_py_plugins-0.2.7-py3-none-any.whl.metadata (2.8
  Downloading mdit_py_plugins-0.2.6-py3-none-any.whl.metadata (2.6
  Downloading mdit_py_plugins-0.2.5-py3-none-any.whl.metadata (2.6
INFO: pip is still looking at multiple versions of mdit-py-plugins
  Downloading mdit_py_plugins-0.2.4-py3-none-any.whl.metadata (2.6
  Downloading mdit_py_plugins-0.2.3-py3-none-any.whl.metadata (2.6
  Downloading mdit_py_plugins-0.2.2-py3-none-any.whl.metadata (2.6
  Downloading mdit_py_plugins-0.2.1-py3-none-any.whl.metadata (2.6
  Downloading mdit_py_plugins-0.2.0-py3-none-any.whl.metadata (2.6
INFO: This is taking longer than usual. You might need to provide
  Downloading mdit_py_plugins-0.1.0-py3-none-any.whl.metadata (2.6
Collecting markdown-it-py[linkify]>=2.0.0 (from gradio==3.38.0)
  Downloading markdown_it_py-3.0.0-py3-none-any.whl.metadata (6.9
  Downloading markdown_it_py-2.2.0-py3-none-any.whl.metadata (6.8
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/pyth
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/py
Requirement already satisfied: annotated-types>=0.6.0 in /usr/loca
Requirement already satisfied: pydantic-core==2.33.2 in /usr/local
Requirement already satisfied: typing-inspection>=0.4.0 in /usr/lc
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/lc
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/li
Requirement already satisfied: click>=7.0 in /usr/local/lib/python
Collecting starlette<0.47.0,>=0.40.0 (from fastapi->gradio==3.38.0)
  Downloading starlette-0.46.2-py3-none-any.whl.metadata (6.2 kB)
Requirement already satisfied: jsonschema-specifications>=2023.03.
Requirement already satisfied: referencing>=0.28.4 in /usr/local/lib/
Requirement already satisfied: rpds-py>=0.7.1 in /usr/local/lib/py
Requirement already satisfied: uc-micro-py in /usr/local/lib/pythc
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.
Requirement already satisfied: sniffio>=1.1 in /usr/local/lib/pyth
Downloading gradio-3.38.0-py3-none-any.whl (19.8 MB)
19.8/19.8 MB 82.0 MB/s
Downloading aiofiles-23.2.1-py3-none-any.whl (15 kB)
Downloading gradio-client-1.10.0-nv3-none-any.whl (322 kB)

```



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322.9/322.9 kB 24.5 MB/s
Downloading markdown_it_py-2.2.0-py3-none-any.whl (84 kB)
84.5/84.5 kB 7.9 MB/s
Downloading mdit_py_plugins-0.3.3-py3-none-any.whl (50 kB)
50.5/50.5 kB 4.5 MB/s
Downloading MarkupSafe-2.1.5-cp311-cp311-manylinux_2_17_x86_64.manylin
Downloading numpy-1.26.4-cp311-cp311-manylinux_2_17_x86_64.manylin
18.3/18.3 MB 90.6 MB/s
Downloading pillow-10.4.0-cp311-cp311-manylinux_2_28_x86_64.whl (4
4.5/4.5 MB 91.0 MB/s
Downloading semantic_version-2.10.0-py2.py3-none-any.whl (15 kB)
Downloading uvicorn-0.34.2-py3-none-any.whl (62 kB)
62.5/62.5 kB 5.3 MB/s
Downloading websockets-11.0.3-cp311-cp311-manylinux_2_5_x86_64.manylin
130.6/130.6 kB 11.7 MB/s
Downloading fastapi-0.115.12-py3-none-any.whl (95 kB)
95.2/95.2 kB 7.6 MB/s
Downloading ffmpeg-0.5.0-py3-none-any.whl (6.0 kB)
Downloading pydub-0.25.1-py2.py3-none-any.whl (32 kB)
Downloading python_multipart-0.0.20-py3-none-any.whl (24 kB)
Downloading starlette-0.46.2-py3-none-any.whl (72 kB)
72.0/72.0 kB 6.2 MB/s

```

Installing collected packages: pydub, websockets, uvicorn, semanti

Attempting uninstall: websockets

Found existing installation: websockets 15.0.1

Uninstalling websockets-15.0.1:

Successfully uninstalled websockets-15.0.1

Attempting uninstall: pillow

Found existing installation: pillow 11.2.1

Uninstalling pillow-11.2.1:

Successfully uninstalled pillow-11.2.1

Attempting uninstall: numpy

Found existing installation: numpy 2.0.2

Uninstalling numpy-2.0.2:

Successfully uninstalled numpy-2.0.2

Attempting uninstall: markupsafe

Found existing installation: MarkupSafe 3.0.2

Uninstalling MarkupSafe-3.0.2:

Successfully uninstalled MarkupSafe-3.0.2

Attempting uninstall: markdown-it-py

Found existing installation: markdown-it-py 3.0.0

Uninstalling markdown-it-py-3.0.0:

Successfully uninstalled markdown-it-py-3.0.0

Attempting uninstall: mdit-py-plugins

Found existing installation: mdit-py-plugins 0.4.2

Uninstalling mdit-py-plugins-0.4.2:

Successfully uninstalled mdit-py-plugins-0.4.2

ERROR: pip's dependency resolver does not currently take into account the dependency on websockets<14.0, but you have websockets 15.0.1. This is usually a problem with the dependency graph you are providing. For example, you might need to install a package that requires websockets<14.0, but you have websockets 15.0.1. google-genai 1.14.0 requires websockets<15.1.0, but you have websockets 15.0.1. Successfully installed aiofiles-23.2.1 fastapi-0.115.12 ffmpeg-0.5.0

WARNING: The following packages were previously imported in this runtime:

[PIL]

You must restart the runtime in order to use newly installed versions.

RESTART SESSION

```

/usr/local/lib/python3.11/dist-packages/gradio_client/documentatio
warnings.warn(f"Could not get documentation group for {cls}: {ex
/usr/local/lib/python3.11/dist-packages/gradio_client/documentatio
warnings.warn(f"Could not get documentation group for {cls}: {ex
<ipython-input-1-df617deabb9f>:103: GradioDeprecationWarning: Usag
inputs=gr.inputs.Textbox(lines=2, placeholder="Enter text here..
<ipython-input-1-df617deabb9f>:103: GradioDeprecationWarning: `opt
inputs=gr.inputs.Textbox(lines=2, placeholder="Enter text here..
<ipython-input-1-df617deabb9f>:103: GradioDeprecationWarning: `num
inputs=gr.inputs.Textbox(lines=2, placeholder="Enter text here..
Colab notebook detected. To show errors in colab notebook, set det
Note: opening Chrome Inspector may crash demo inside Colab noteboc

```

To create a public link, set `share=True` in `launch()`.

Running on <https://localhost:7860/>

Sentiment Analysis

Enter text to analyze its sentiment.

text

Enter text here...

Clear

Submit

output

Flag

- TPU memory usage and utilization can now be checked with `!tpu-info`
- Gemini Chat responses are now grounded in relevant sources
- Added a new "Create Gemini API key" link in the user secrets panel
- Added a new "Gemini: Creating a prompt" snippet and touched up the existing "Gemini: Connecting to Gemini" snippet
- Added the ability to specify custom placeholder text for various interactive form params (see [examples](#))
- Keyboard navigation a11y improvements to comments UI
- Various minor rendering improvements to interactive forms UI
- A11y improvements for the run button and header
- Updated tooltip styling
- A11y improvements for the file browser's disk usage bar
- On mobile, tooltips now trigger on long press
- On mobile, release notes updates will no longer display automatically
- Python package upgrades
 - astropy 5.3.4 -> 6.1.2
 - bigframes 1.11.1 -> 1.14.0
 - bokeh 3.3.4 -> 3.4.3
 - dask 2023.8.1 -> 2024.7.1
 - earthengine-api 0.1.412 -> 0.1.416
 - geopandas 0.13.2 -> 0.14.4

- kagglehub 0.2.8 -> 0.2.9
- keras 2.15.0 -> 3.4.1
- lightgbm 4.1.0 -> 4.4.0
- malloy 2023.1067 -> 2024.1067
- numba 0.58.1 -> 0.60.0
- numpy 1.25.2 -> 1.26.4
- opencv-python 4.8.0.76 -> 4.10.0.84
- pandas 2.0.3 -> 2.1.4
- pandas-gbq 0.19.2 -> 0.23.1
- panel 1.3.8 -> 1.4.5
- requests 2.31.0 -> 2.32.3
- scikit-learn 1.2.2. -> 1.3.2
- scipy 1.11.4 -> 1.13.1
- tensorboard 2.15.2 -> 2.17.0
- tensorflow 2.15.0 -> 2.17.0
- tf-keras 2.15.1 -> 2.17.0
- xarray 2023.7.0 -> 2024.6.0
- xgboost 2.0.3 -> 2.1.1
- Python package inclusions
 - einops 0.8.0

2024-07-22

- You can now embed Google sheets directly into Colab to streamline interactions with data with InteractiveSheet.
Example:


```
from google.colab import sheets
sh = sheets.InteractiveSheet()
df = sh.as_df()
```
- Fixed multiple rendering bugs in cell editors with wide text content (i.e. text is no longer hidden or clipped)
- Fixed multiple accessibility issues in Colab's comments feature (e.g. proper keyboard focus management, added accessibility landmarks, etc)
- Fixed bug where AI code generation would fail for extremely long broken code snippets
- Fixed multiple scrollbar bugs in the user secrets panel
- Added the ability for workspace admin to purchase Colab Pro and Pro+ Subscriptions for users
- Fixed bug where user secrets couldn't be moved to a tab
- Fixed several focus management accessibility issues in tabs, the table of contents, the left toolbar, and the run button
- Fixed bug where overflowing cells may be omitted when pasting from Google Sheets
- Fixed bug where the generate code button did not activate on touch
- Python package upgrades
 - bigframes 1.9.0 -> 1.11.1
 - cvxpy 1.3.4 -> 1.5.2
 - earthengine-api 0.1.408 -> 0.1.412
 - google-api-core 2.11.1 -> 2.19.1
 - google-api-python-client 2.84.0 -> 2.137.0
 - google-cloud-aiplatform 1.56.0 -> 1.59.0
 - google-cloud-bigquery 3.21.0 -> 3.25.0
 - google-cloud-core 2.3.3 -> 2.4.1
 - google-cloud-datastore 2.15.2 -> 2.19.0
 - google-cloud-firestore 2.11.1 -> 2.16.1
 - google-cloud-functions 1.13.3 -> 1.16.4
 - google-generativeai 0.5.4 -> 0.7.2

- kagglehub 0.2.5 -> 0.2.8
- pip 23.1.2 -> 24.1.2
- setuptools 67.7.2 -> 71.0.4
- sympy 1.12.1 -> 1.13.1
- torch 2.3.0 -> 2.3.1
- transformers 4.41.2 -> 4.42.4
- Python package inclusions
 - accelerate 0.32.1

2024-06-18

- Inline AI completions are now available to users on the free-of-charge tier
- Reduced latency for LSP and terminal connections
- Improved quality of inline completions
- Visual improvements to switch controls across Colab
- Various bug fixes, performance and a11y improvements to the user secrets panel
- Improved tooltip UX behavior
- Improved behavior when copying data from Google Sheets and pasting in Colab
- Scroll to cell fixes for single tabbed view and jump to cell command
- Improved tab header behavior
- A11y improvements for notebook-focused cells
- Python package upgrades
 - torch 2.2.1 -> 2.3.0
 - torchaudio 2.2.1 -> 2.3.0
 - torchvision 0.17.1 -> 0.18.0
 - torchtext 0.17.1 -> 0.18.0
 - google-cloud-aiplatform 1.51.0 -> 1.56.0
 - bigframes 1.5.0 -> 1.8.0
 - regex 2023.12.25 -> 2024.5.15

2024-05-13

- Code actions are now supported to automatically improve and refactor code. Code actions can be triggered by the keyboard shortcut "Ctrl/⌘ + ."
- Python package upgrades
 - bigframes 1.0.0 -> 1.5.0
 - google-cloud-aiplatform 1.47.0 -> 1.51.0
 - jax[tpu] 0.4.23 -> 0.4.26
- Python package inclusions
 - cudf 24.4.1

2024-04-15

- TPU v2 runtime is now available
- L4 runtime is now available for paid users
- New distributed fine-tuning Gemma tutorial on TPUs ([GitHub](#))
- Symbol rename is now supported with keyboard shortcut F2
- Fixed bug causing inability to re-upload deleted files
- Fixed breaking bug in colabtools %upload_files_async
- Added syntax highlighting to %%writefile cells
- Cuda dependencies that come with Torch are cached for faster downloads for

packages that require Torch and its dependencies ([GitHub issue](#))

- Python package upgrades
 - bigframes 0.24.0 -> 1.0.0
 - duckdb 0.9.2 -> 0.10.1
 - google-cloud-aiplatform 1.43.0 -> 1.47.0
 - jax 0.4.23 -> 0.4.26

2024-03-13

- Fixed bug that sometimes caused UserSecrets to move / disappear
- Improved messaging for mounting drive in an unsupported environment ([GitHub issue](#))
- Python package upgrades
 - torch 2.1.0 -> 2.2.1
 - torchaudio 2.1.0 -> 2.2.1
 - torchvision 0.16.0 -> 0.17.1
 - torchtext 0.16.0 -> 0.17.1
 - PyMC 5.7.2 -> 5.10.4
 - BigFrames 0.21.0 -> 0.24.0
 - google-cloud-aiplatform 1.42.1 -> 1.43.0
 - tornado 6.3.2 -> 6.3.3

2024-02-21

- Try out Gemma on [Colab!](#)
- Allow unicode in form text inputs
- Display documentation and link to source when displaying functions
- Display image-like ndarrays as images
- Improved UX around quick charts and execution error suggestions
- Released Marketplace image for the month of February ([GitHub issue](#))
- Python package upgrades
 - bigframes 0.19.2 -> 0.21.0
 - regex 2023.6.3 -> 2023.12.25
 - spacy 3.6.1 -> 3.7.4
 - beautifulsoup4 4.11.2 -> 4.12.3
 - tensorflow-probability 0.22.0 -> 0.23.0
 - google-cloud-language 2.9.1 -> 2.13.1
 - google-cloud-aiplatform 1.39.0 -> 1.42.1
 - transformers 4.35.2 -> 4.37.2
 - pyarrow 10.0.1 -> 14.0.2

2024-01-29

- New [Kaggle Notebooks <> Colab updates!](#)
Now you can:
 - Import directly from Colab without having to download/re-upload
 - Upload via link, by pasting Google Drive or Colab URLs
 - Export & run Kaggle Notebooks on Colab with 1 click
- Try these notebooks that talk to Gemini:
 - [Gemini and Stable Diffusion](#)
 - [Learning with Gemini and ChatGPT](#)
 - [Talk to Gemini with Google's Speech to Text API](#)
 - [Sell lemonade with Gemini and Sheets](#)
 - [Generate images with Gemini and Vertex](#)
- Python package upgrades
 - google-cloud-aiplatform 1.38.1 -> 1.39.0
 - bigframes 0.18.0 -> 0.19.2

- polars 0.17.3 -> 0.20.2
- gdown 4.6.6 -> 4.7.3 ([GitHub issue](#))
- tensorflow-hub 0.15.0 -> 0.16.0
- flax 0.7.5 -> 0.8.0
- Python package inclusions
 - sentencepiece 0.1.99

2024-01-08

- Avoid nested scrollbars for large outputs by using `google.colab.output.no_vertical_scrollbar` [Example notebook](#)
- Fix [bug](#) where downloading models from Hugging Face could freeze
- Python package upgrades
 - huggingface-hub 0.19.4 -> 0.20.2
 - bigframes 0.17.0 -> 0.18.0

2023-12-18

- Expanded access to AI coding has arrived in Colab across 175 locales for all tiers of Colab users
- Improvements to display of ML-based inline completions (for eligible Pro/Pro+ users)
- Started a series of [notebooks](#) highlighting Gemini API capabilities
- Enable ⌘/Ctrl+L to select the full line in an editor
- Fixed [bug](#) where we weren't correctly formatting output from multiple execution results
- Python package upgrades
 - CUDA 11.8 to CUDA 12.2
 - tensorflow 2.14.0 -> 2.15.0
 - tensorboard 2.14.0 -> 2.15.0
 - keras 2.14.0 -> 2.15.0
 - Nvidia drivers 525.105.17 -> 535.104.05
 - tensorflow-gcs-config 2.14.0 -> 2.15.0
 - bigframes 0.13.0 -> 0.17.0
 - geemap 0.28.2 -> 0.29.6
 - pyarrow 9.0.0 -> 10.0.1
 - google-generativeai 0.2.2 -> 0.3.1
 - jax 0.4.20 -> 0.4.23
 - jaxlib 0.4.20 -> 0.4.23
- Python package inclusions
 - kagglehub 0.1.4
 - google-cloud-aiplatform 1.38.1

2023-11-27

- Removed warning when calling `await` to make it render as code
- Added "Run selection" to the cell context menu
- Added highlighting for the `%python` cell magic
- Launched AI coding features for Pro/Pro+ users in more locales
- Python package upgrades
 - bigframes 0.12.0 -> 0.13.0
- Python package inclusions
 - transformers 4.35.2
 - google-generativeai 0.2.2

2023-11-08

- Launched Secrets, for safe storage of private keys on Colab ([tweet](#))

- Fixed issue where TensorBoard would not load ([#3990](#))
- Python package upgrades
 - lightgbm 4.0.0 -> 4.1.0
 - bigframes 0.10.0 -> 0.12.0
 - bokeh 3.2.2 -> 3.3.0
 - duckdb 0.8.1 -> 0.9.1
 - numba 0.56.4 -> 0.58.1
 - tweepy 4.13.0 -> 4.14.0
 - jax 0.4.16 -> 0.4.20
 - jaxlib 0.4.16 -> 0.4.20

2023-10-23

- Updated the **Open notebook** dialog for better usability and support for smaller screen sizes
- Added smart paste support for data from Google Sheets for R notebooks
- Enabled showing release notes in a tab
- Launched AI coding features for Pro/Pro+ users in Australia [AU](#) Canada [CA](#) India [IN](#) and Japan [JP](#) ([tweet](#))
- Python package upgrades
 - earthengine-api 0.1.357 -> 0.1.375
 - flax 0.7.2 -> 0.7.4
 - geemap 0.27.4 -> 0.28.2
 - jax 0.4.14 -> 0.4.16
 - jaxlib 0.4.14 -> 0.4.16
 - keras 2.13.1 -> 2.14.0
 - tensorboard 2.13.0 -> 2.14.1
 - tensorflow 2.13.0 -> 2.14.0
 - tensorflow-gcs-config 2.13.0 -> 2.14.0
 - tensorflow-hub 0.14.0 -> 0.15.0
 - tensorflow-probability 0.20.1 -> 0.22.0
 - torch 2.0.1 -> 2.1.0
 - torchaudio 2.0.2 -> 2.1.0
 - torchtext 0.15.2 -> 0.16.0
 - torchvision 0.15.2 -> 0.16.0
 - xgboost 1.7.6 -> 2.0.0
- Python package inclusions
 - bigframes 0.10.0
 - malloy 2023.1056

2023-09-22

- Added the ability to scope an AI generated suggestion to a specific Pandas dataframe ([tweet](#))
- Added Colab link previews to Docs ([tweet](#))
- Added smart paste support for data from Google Sheets
- Increased font size of dropdowns in interactive forms
- Improved rendering of the notebook when printing
- Python package upgrades
 - tensorflow 2.12.0 -> 2.13.0
 - tensorboard 2.12.3 -> 2.13.0
 - keras 2.12.0 -> 2.13.1
 - tensorflow-gcs-config 2.12.0 -> 2.13.0
 - scipy 1.10.1 -> 1.11.2
 - cython 0.29.6 -> 3.0.2
- Python package inclusions
 - geemap 0.26.0

2023-08-18

- Added "Change runtime type" to the menu in the connection button
- Improved auto-reconnection to an already running notebook ([#3764](#))
- Increased the specs of our highmem machines for Pro users

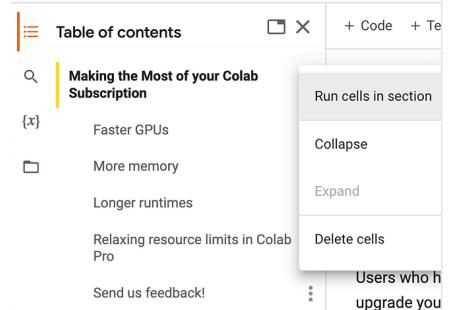
- Fixed add-apt-repository command on Ubuntu 22.04 runtime ([#3867](#))
- Python package upgrades
 - bokeh 2.4.3 -> 3.2.2
 - cmake 3.25.2 -> 3.27.2
 - cryptography 3.4.8 -> 41.0.3
 - dask 2022.12.1 -> 2023.8.0
 - distributed 2022.12.1 -> 2023.8.0
 - earthengine-api 0.1.358 -> 0.1.364
 - flax 0.7.0 -> 0.7.2
 - ipython-sql 0.4.0 -> 0.5.0
 - jax 0.4.13 -> 0.4.14
 - jaxlib 0.4.13 -> 0.4.14
 - lightgbm 3.3.5 -> 4.0.0
 - mkl 2019.0 -> 2023.2.0
 - notebook 6.4.8 -> 6.5.5
 - numpy 1.22.4 -> 1.23.5
 - opencv-python 4.7.0.72 -> 4.8.0.76
 - pillow 8.4.0 -> 9.4.0
 - plotly 5.13.1 -> 5.15.0
 - prettytable 0.7.2 -> 3.8.0
 - pytensor 2.10.1 -> 2.14.2
 - spacy 3.5.4 -> 3.6.1
 - statsmodels 0.13.5 -> 0.14.0
 - xarray 2022.12.0 -> 2023.7.0
- Python package inclusions
 - PyDrive2 1.6.3

2023-07-21

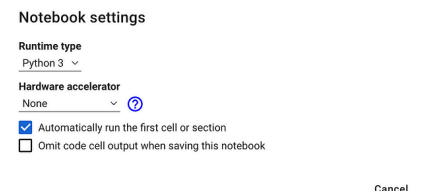
- Launched auto-plotting for dataframes, available using the chart button that shows up alongside datatables ([post](#))



- Added a menu to the table of contents to support running a section or collapsing/expanding sections ([post](#))



- Added an option to automatically run the first cell or section, available under Edit -> Notebook settings ([post](#))



- Launched Pro/Pro+ to Algeria, Argentina, Chile, Ecuador, Egypt, Ghana, Kenya, Malaysia, Nepal, Nigeria, Peru, Rwanda, Saudi Arabia, South Africa, Sri Lanka, Tunisia, and Ukraine ([tweet](#))
- Added a command, "Toggle tab moves focus" for toggling tab trapping in the editor (Tools -> Command palette, "Toggle tab moves focus")
- Fixed issue where `files.upload()` was sometimes returning an incorrect filename

([#1550](#))

- Fixed f-string syntax highlighting bug ([#3802](#))
- Disabled ambiguous characters highlighting for commonly used LaTeX characters ([#3648](#))
- Upgraded Ubuntu from 20.04 LTS to [22.04 LTS](#)
- Updated the Colab Marketplace VM image
- Python package upgrades:
 - autograd 1.6.1 -> 1.6.2
 - drivefs 76.0 -> 77.0
 - flax 0.6.11 -> 0.7.0
 - earthengine-api 0.1.357 -> 0.1.358
 - GDAL 3.3.2->3.4.3
 - google-cloud-bigquery-storage 2.20.0 -> 2.22.2
 - gspread-dataframe 3.0.8 -> 3.3.1
 - holidays 0.27.1 -> 0.29
 - jax 0.4.10 -> jax 0.4.13
 - jaxlib 0.4.10 -> jax 0.4.13
 - jupyterlab-widgets 3.0.7 -> 3.0.8
 - nbformat 5.9.0 -> 5.9.1
 - opencv-python-headless 4.7.0.72 -> 4.8.0.74
 - pygame 2.4.0 -> 2.5.0
 - spacy 3.5.3 -> 3.5.4
 - SQLAlchemy 2.0.16 -> 2.0.19
 - tabulate 0.8.10 -> 0.9.0
 - tensorflow-hub 0.13.0 -> 0.14.0

2023-06-23

- Launched AI coding features to subscribed users starting with Pro+ users in the US ([tweet](#), [post](#))
- Added the Kernel Selector in the Notebook Settings ([tweet](#))
- Fixed double space trimming issue in markdown [#3766](#)
- Fixed run button indicator not always centered [#3609](#)
- Fixed inconsistencies for automatic indentation on multi-line [#3697](#)
- Upgraded Python from 3.10.11 to 3.10.12
- Python package updates:
 - duckdb 0.7.1 -> 0.8.1
 - earthengine-api 0.1.350 -> 0.1.357
 - flax 0.6.9 -> 0.6.11
 - google-cloud-bigquery 3.9.0 -> 3.10.0
 - google-cloud-bigquery-storage 2.19.1 -> 2.20.0
 - grpcio 1.54.0 -> 1.56.0
 - holidays 0.25 -> 0.27.1
 - nbformat 5.8.0 -> 5.9.0
 - prophet 1.1.3 -> 1.1.4
 - pydata-google-auth 1.7.0 -> 1.8.0
 - spacy 3.5.2 -> 3.5.3
 - tensorboard 2.12.2 -> 2.12.3
 - xgboost 1.7.5 -> 1.7.6
- Python package inclusions:
 - gcsfs 2023.6.0
 - geopandas 0.13.2
 - google-cloud-bigquery-connection 1.12.0
 - google-cloud-functions 1.13.0
 - grpc-google-iam-v1 0.12.6
 - multidict 6.0.4
 - tensorboard-data-server 0.7.1

2023-06-02

- Released the new site [colab.google](#)

- Published Colab's Docker runtime image to us-docker.pkg.dev/colab-images/public/runtime ([tweet](#), [instructions](#))
- Launched support for Google children accounts ([tweet](#))
- Launched DagsHub integration ([tweet](#), [post](#))
- Upgraded to Monaco Editor Version 0.37.1
- Fixed various Vim keybinding bugs
- Fixed issue where the N and P letters sometimes couldn't be typed ([#3664](#))
- Fixed rendering support for compositional inputs ([#3660](#), [#3679](#))
- Fixed lag in notebooks with lots of cells ([#3676](#))
- Improved support for R by adding a Runtime type notebook setting (Edit -> Notebook settings)
- Improved documentation for connecting to a local runtime (Connect -> Connect to a local runtime)
- Python package updates:
 - holidays 0.23 -> 0.25
 - jax 0.4.8 -> 0.4.10
 - jaxlib 0.4.8 -> 0.4.10
 - pip 23.0.1 -> 23.1.2
 - tensorflow-probability 0.19.0 -> 0.20.1
 - torch 2.0.0 -> 2.0.1
 - torchaudio 2.0.1 -> 2.0.2
 - torchdata 0.6.0 -> 0.6.1
 - torchtext 0.15.1 -> 0.15.2
 - torchvision 0.15.1 -> 0.15.2
 - tornado 6.2 -> 6.3.1

2023-05-05

- Released GPU type selection for paid users, allowing them to choose a preferred NVidia GPU
- Upgraded R from 4.2.3 to 4.3.0
- Upgraded Python from 3.9.16 to 3.10.11
- Python package updates:
 - attrs 22.2.0 -> attrs 23.1.0
 - earthengine-api 0.1.349 -> earthengine-api 0.1.350
 - flax 0.6.8 -> 0.6.9
 - grpcio 1.53.0 -> 1.54.0
 - nbclient 0.7.3 -> 0.7.4
 - tensorflow-datasets 4.8.3 -> 4.9.2
 - termcolor 2.2.0 -> 2.3.0
 - zict 2.2.0 -> 3.0.0

2023-04-14

- Python package updates:
 - google-api-python-client 2.70.0 -> 2.84.0
 - google-auth-oauthlib 0.4.6 -> 1.0.0
 - google-cloud-bigquery 3.4.2 -> 3.9.0
 - google-cloud-datastore 2.11.1 -> 2.15.1
 - google-cloud-firestore 2.7.3 -> 2.11.0
 - google-cloud-language 2.6.1 -> 2.9.1
 - google-cloud-storage 2.7.0 -> 2.8.0
 - google-cloud-translate 3.8.4 -> 3.11.1
 - networkx 3.0 -> 3.1
 - notebook 6.3.0 -> 6.4.8
 - jax 0.4.7 -> 0.4.8
 - pandas 1.4.4 -> 1.5.3
 - spacy 3.5.1 -> 3.5.2
 - SQLAlchemy 1.4.47 -> 2.0.9
 - xgboost 1.7.4 -> 1.7.5

2023-03-31

- Improve bash ! syntax highlighting ([GitHub issue](#))

- Fix bug where VIM keybindings weren't working in the file editor
- Upgraded R from 4.2.2 to 4.2.3
- Python package updates:
 - arviz 0.12.1 -> 0.15.1
 - astropy 4.3.1 -> 5.2.2
 - dopamine-rl 1.0.5 -> 4.0.6
 - gensim 3.6.0 -> 4.3.1
 - ipykernel 5.3.4 -> 5.5.6
 - ipython 7.9.0 -> 7.34.0
 - jax 0.4.4 -> 0.4.7
 - jaxlib 0.4.4 -> 0.4.7
 - jupyter_core 5.2.0 -> 5.3.0
 - keras 2.11.0 -> 2.12.0
 - lightgbm 2.2.3 -> 3.3.5
 - matplotlib 3.5.3 -> 3.7.1
 - nltk 3.7 -> 3.8.1
 - opencv-python 4.6.0.66 -> 4.7.0.72
 - plotly 5.5.0 -> 5.13.1
 - pymc 4.1.4 -> 5.1.2
 - seaborn 0.11.2 -> 0.12.2
 - spacy 3.4.4 -> 3.5.1
 - sympy 1.7.1 -> 1.11.1
 - tensorboard 2.11.2 -> 2.12.0
 - tensorflow 2.11.0 -> 2.12.0
 - tensorflow-estimator 2.11.0 -> 2.12.0
 - tensorflow-hub 0.12.0 -> 0.13.0
 - torch 1.13.1 -> 2.0.0
 - torchaudio 0.13.1 -> 2.0.1
 - torchtext 0.14.1 -> 0.15.1
 - torchvision 0.14.1 -> 0.15.1

2023-03-10

- Added the [Colab editor shortcuts](#) example notebook
- Fixed triggering of @-mention and email autocomplete for large comments ([GitHub issue](#))
- Added View Resources to the Runtime menu
- Made file viewer images fit the view by default, resizing to original size on click
- When in VIM mode, enable copy as well as allowing propagation to monaco-vim to escape visual mode ([GitHub issue](#))
- Upgraded CUDA 11.6.2 -> 11.8.0 and cuDNN 8.4.0.27 -> 8.7.0.84
- Upgraded Nvidia drivers 525.78.01 -> 530.30.02
- Upgraded Python 3.8.10 -> 3.9.16
- Python package updates:
 - beautifulsoup4 4.6.3 -> 4.9.3
 - bokeh 2.3.3 -> 2.4.3
 - debugpy 1.0.0 -> 1.6.6
 - Flask 1.1.4 -> 2.2.3
 - jax 0.3.25 -> 0.4.4
 - jaxlib 0.3.25 -> 0.4.4
 - Jinja2 2.11.3 -> 3.1.2
 - matplotlib 3.2.2 -> 3.5.3
 - nbconvert 5.6.1 -> 6.5.4
 - pandas 1.3.5 -> 1.4.4
 - pandas-datareader 0.9.0 -> 0.10.0
 - pandas-profiling 1.4.1 -> 3.2.0
 - Pillow 7.1.2 -> 8.4.0
 - plotnine 0.8.0 -> 0.10.1
 - scikit-image 0.18.3 -> 0.19.3
 - scikit-learn 1.0.2 -> 1.2.2
 - scipy 1.7.3 -> 1.10.1
 - setuptools 57.4.0 -> 63.4.3
 - sklearn-pandas 1.8.0 -> 2.2.0
 - statsmodels 0.12.2 -> 0.13.5
 - urllib3 1.24.3 -> 1.26.14
 - Werkzeug 1.0.1 -> 2.2.3
 - wrapt 1.14.1 -> 1.15.0
 - xgboost 0.90 -> 1.7.4
 - xlrd 1.2.0 -> 2.0.1

2023-02-17

- Show graphs of RAM and disk usage in notebook toolbar
- Copy cell links directly to the clipboard instead of showing a dialog when clicking on the link icon in the cell toolbar
- Updated the [Colab Marketplace VM image](#)
- Upgraded CUDA to 11.6.2 and cuDNN to 8.4.0.27
- Python package updates:
 - tensorflow 2.9.2 -> 2.11.0
 - tensorboard 2.9.1 -> 2.11.2
 - keras 2.9.0 -> 2.11.0
 - tensorflow-estimator 2.9.0 -> 2.11.0
 - tensorflow-probability 0.17.0 -> 0.19.0
 - tensorflow-gcs-config 2.9.0 -> 2.11.0
 - earthengine-api 0.1.339 -> 0.1.341
 - flatbuffers 1.12 -> 23.1.21
 - platformdirs 2.6.2 -> 3.0.0
 - pydata-google-auth 1.6.0 -> 1.7.0
 - python-utils 3.4.5 -> 3.5.2
 - tenacity 8.1.0 -> 8.2.1
 - tiffle 2023.1.23.1 -> 2023.2.3
 - notebook 5.7.16 -> 6.3.0
 - tornado 6.0.4 -> 6.2
 - aiohttp 3.8.3 -> 3.8.4
 - charset-normalizer 2.1.1 -> 3.0.1
 - fastai 2.7.0 -> 2.7.1
 - soundfile 0.11.0 -> 0.12.1
 - typing-extensions 4.4.0 -> 4.5.0
 - widgetsnbextension 3.6.1 -> 3.6.2
 - pydantic 1.10.4 -> 1.10.5
 - zipp 3.12.0 -> 3.13.0
 - numpy 1.21.6 -> 1.22.4
 - drivefs 66.0 -> 69.0
 - gdal 3.0.4 -> 3.3.2 [GitHub issue](#)
- Added libudunits2-dev for smoother R package installs [GitHub issue](#)

2023-02-03

- Improved tooltips for pandas series to show common statistics about the series object
- Made the forms dropdown behave like an autocomplete box when it allows input
- Updated the nvidia driver from 460.32.03 to 510.47.03
- Python package updates:
 - absl-py 1.3.0 -> 1.4.0
 - bleach 5.0.1 -> 6.0.0
 - cachetools 5.2.1 -> 5.3.0
 - cmdstanpy 1.0.8 -> 1.1.0
 - dnspython 2.2.1 -> 2.3.0
 - fsspec 2022.11.0 -> 2023.1.0
 - google-cloud-bigquery-storage 2.17.0 -> 2.18.1
 - holidays 0.18 -> 0.19
 - jupyter-core 5.1.3 -> 5.2.0
 - packaging 21.3 -> 23.0
 - prometheus-client 0.15.0 -> 0.16.0
 - pyct 0.4.8 -> 0.5.0
 - pydata-google-auth 1.5.0 -> 1.6.0
 - python-slugify 7.0.0 -> 8.0.0
 - sqlalchemy 1.4.46 -> 2.0.0
 - tensorflow-io-gcs-filesystem 0.29.0 -> 0.30.0
 - tiffle 2022.10.10 -> 2023.1.23.1
 - zipp 3.11.0 -> 3.12.0
 - Pinned sqlalchemy to version 1.4.46

2023-01-12

- Added support for @-mention and email autocomplete in comments
- Improved errors when GitHub notebooks can't be loaded

- Increased color contrast for colors used for syntax highlighting in the code editor
- Added terminal access for custom GCE VM runtimes
- Upgraded Ubuntu from 18.04 LTS to 20.04 LTS ([GitHub issue](#))
- Python package updates:
 - GDAL 2.2.2 -> 2.2.3.
 - NumPy from 1.21.5 to 1.21.6.
 - attrs 22.1.0 -> 22.2.0
 - chardet 3.0.4 -> 4.0.0
 - cloudpickle 1.6.0 -> 2.2.0
 - filelock 3.8.2 -> 3.9.0
 - google-api-core 2.8.2 -> 2.11.0
 - google-api-python-client 1.12.11 -> 2.70.0
 - google-auth-http2 0.0.3 -> 0.1.0
 - google-cloud-bigquery 3.3.5 -> 3.4.1
 - google-cloud-datastore 2.9.0 -> 2.11.0
 - google-cloud-firestore 2.7.2 -> 2.7.3
 - google-cloud-storage 2.5.0 -> 2.7.0
 - holidays 0.17.2 -> holidays 0.18
 - importlib-metadata 5.2.0 -> 6.0.0
 - networkx 2.8.8 -> 3.0
 - opencv-python-headless 4.6.0.66 -> 4.7.0.68
 - pip 21.1.3 -> 22.04
 - pip-tools 6.2.0 -> 6.6.2
 - prettytable 3.5.0 -> 3.6.0
 - requests 2.23.0 -> 2.25.1
 - termcolor 2.1.1 -> 2.2.0
 - torch 1.13.0 -> 1.13.1
 - torchaudio 0.13.0 -> 0.13.1
 - torchtext 0.14.0 -> 0.14.1
 - torchvision 0.14.0 -> 0.14.1

2022-12-06

- Made fallback runtime version available until mid-December ([GitHub issue](#))
- Upgraded to Python 3.8 ([GitHub issue](#))
- Python package updates:
 - jax from 0.3.23 to 0.3.25, jaxlib from 0.3.22 to 0.3.25
 - pyarrow from 6.0.1 to 9.0.0
 - torch from 1.12.1 to 1.13.0
 - torchaudio from 0.12.1 to 0.13.0
 - torchvision from 0.13.1 to 0.14.0
 - torchtext from 0.13.1 to 0.14.0
 - xlrd from 1.1.0 to 1.2.0
 - DriveFS from 62.0.1 to 66.0.3
- Made styling of markdown tables in outputs match markdown tables in text cells
- Improved formatting for empty interactive table rows
- Fixed syntax highlighting for variables with names that contain Python keywords ([GitHub issue](#))

2022-11-11

- Added more dark editor themes for Monaco (when in dark mode, "Editor colorization" appears as an option in the Editor tab of the Tools → Settings dialog)
- Fixed bug where collapsed forms were deleted on mobile ([GitHub issue](#))
- Python package updates:
 - rpy2 from 3.4.0 to 3.5.5 ([GitHub issue](#))
 - notebook from 5.5.0 to 5.7.16
 - tornado from 5.1.1 to 6.0.4
 - tensorflow_probability from 0.16.0 to 0.17.0
 - pandas-gbq from 0.13.3 to 0.17.9
 - protobuf from 3.17.3 to 3.19.6

- google-api-core[grpc] from 1.31.5 to 2.8.2
- google-cloud-bigquery from 1.21.0 to 3.3.5
- google-cloud-core from 1.0.1 to 2.3.2
- google-cloud-datastore from 1.8.0 to 2.9.0
- google-cloud-firestore from 1.7.0 to 2.7.2
- google-cloud-language from 1.2.0 to 2.6.1
- google-cloud-storage from 1.18.0 to 2.5.0
- google-cloud-translate from 1.5.0 to 3.8.4

2022-10-21

- Launched a single-click way to get from BigQuery to Colab to further explore query results ([announcement](#))
- Launched [Pro, Pro+, and Pay As You Go](#) to 19 additional countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, Greece, Hungary, Latvia, Lithuania, Norway, Portugal, Romania, Slovakia, Slovenia, and Sweden ([tweet](#))
- Updated jax from 0.3.17 to 0.3.23, jaxlib from 0.3.15 to 0.3.22, TensorFlow from 2.8.2 to 2.9.2, CUDA from 11.1 to 11.2, and cuDNN from 8.0 to 8.1 ([backend-info](#))
- Added a readonly option to [drive.mount](#)
- Fixed bug where Xarray was not working ([GitHub issue](#))
- Modified Markdown parsing to ignore block quote symbol within MathJax ([GitHub issue](#))

2022-09-30

- Launched [Pay As You Go](#), allowing premium