Working with Interactive Environments Using Google Colab

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Overview

Colab is a Google research project

Jupyter notebooks hosted on Google drive

Share using Google Drive

Code runs on dedicated VM instance

Free and requires minimal setup

Local runtimes can be used too

Interactive plots and widgets

Google Colab

Free, Google drive-based Jupyter notebooks that can be used to develop ML models with minimal setup.

Google Colab

Notebooks stored on Google Drive

- Can use for sharing

Can upload/import existing notebooks

Currently supports Python 2.7 and 3.6

- No support yet for R or Scala

Google Colab

Code runs on dedicated virtual machines

Can use prototype models using GPUs for free

Maximum lifetime enforced by system

Unsuitable for long-running jobs

Local Runtimes

Can connect to local runtime using Jupyter

Executes code on local hardware

Can access local file system

Exercise caution when executing third-party code locally

Demo

Introducing Google Colab

Demo

Using interactive forms

Demo

Working with widgets

Demo

Building a machine learning model

Summary

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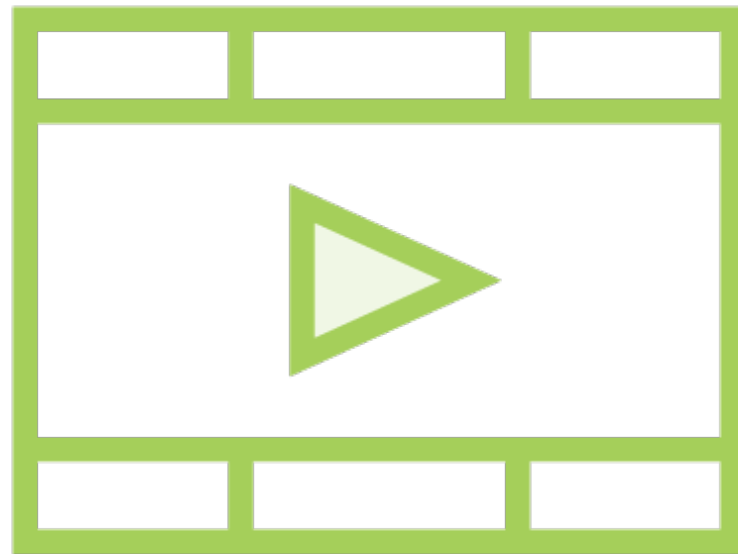Jupyter notebooks hosted on Google drive

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Related Courses

Data Mining and the Analytics Workflow

Preparing Data for Machine Learning

Designing a Machine Learning Model