



Università degli  
Studi di Pavia

# *Deep Learning*

## *LOO- Apropos Colab*

it's zero-zero :)

Marco Piastra & Andrea Pedrini(\*)

(\*) Dipartimento di Matematica F. Casorati

*This presentation can be downloaded at:*  
<http://vision.unipv.it/DL>

*This is just a reminder:  
see the video for further explanation*

# colab from Google

<https://colab.research.google.com/>

## ■ What is it

An online (simplified) programming environment

Based on Python and Jupyter

Web-only interface (you need just gmail account and a browser)

## **Pros**

- Any setup required is either available right away or feasible with little effort
- State-of-art hardware available for free
- Fully integrated with Google Drive and git repositories (e.g. GitHub)

## **Cons**

- It is not a complete programming environment (i.e. no editor, debugger, inspector)
- If you need one, you need to set it up for yourself (on a device of yours)

Welcome To Colaboratory - Colab x +

colab.research.google.com/notebooks/intro.ipynb

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## What is Colaboratory?

Colaboratory, or "Colab" for short, allows you to write and execute Python in your browser, with

- Zero configuration required
- Free access to GPUs
- Easy sharing

Whether you're a **student**, a **data scientist** or an **AI researcher**, Colab can make your work easier. Watch [Introduction to Colab](#) to learn more, or just get started below!

### Getting started

The document you are reading is not a static web page, but an interactive environment called a **Colab notebook** that lets you write and execute code.

For example, here is a **code cell** with a short Python script that computes a value, stores it in a variable, and prints the result:

```
seconds_in_a_day = 24 * 60 * 60
seconds_in_a_day
```

86400

To execute the code in the above cell, select it with a click and then either press the play button to the left of the code, or use the keyboard shortcut "Command/Ctrl+Enter". To edit the code, just click the cell and start editing.

Variables that you define in one cell can later be used in other cells:

```
[ ] seconds_in_a_week = 7 * seconds_in_a_day
seconds_in_a_week
```

604800

Colab notebooks allow you to combine **executable code** and **rich text** in a single document, along with **images**, **HTML**, **LaTeX** and more. When you create your own Colab notebooks, they are stored in your Google Drive account. You can easily share your Colab notebooks with co-workers or friends, allowing them to comment on your notebooks or even edit them. To learn more, see [Overview of Colab](#). To create a new Colab notebook you can use the File menu above, or use the following link: [create a new Colab notebook](#).

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