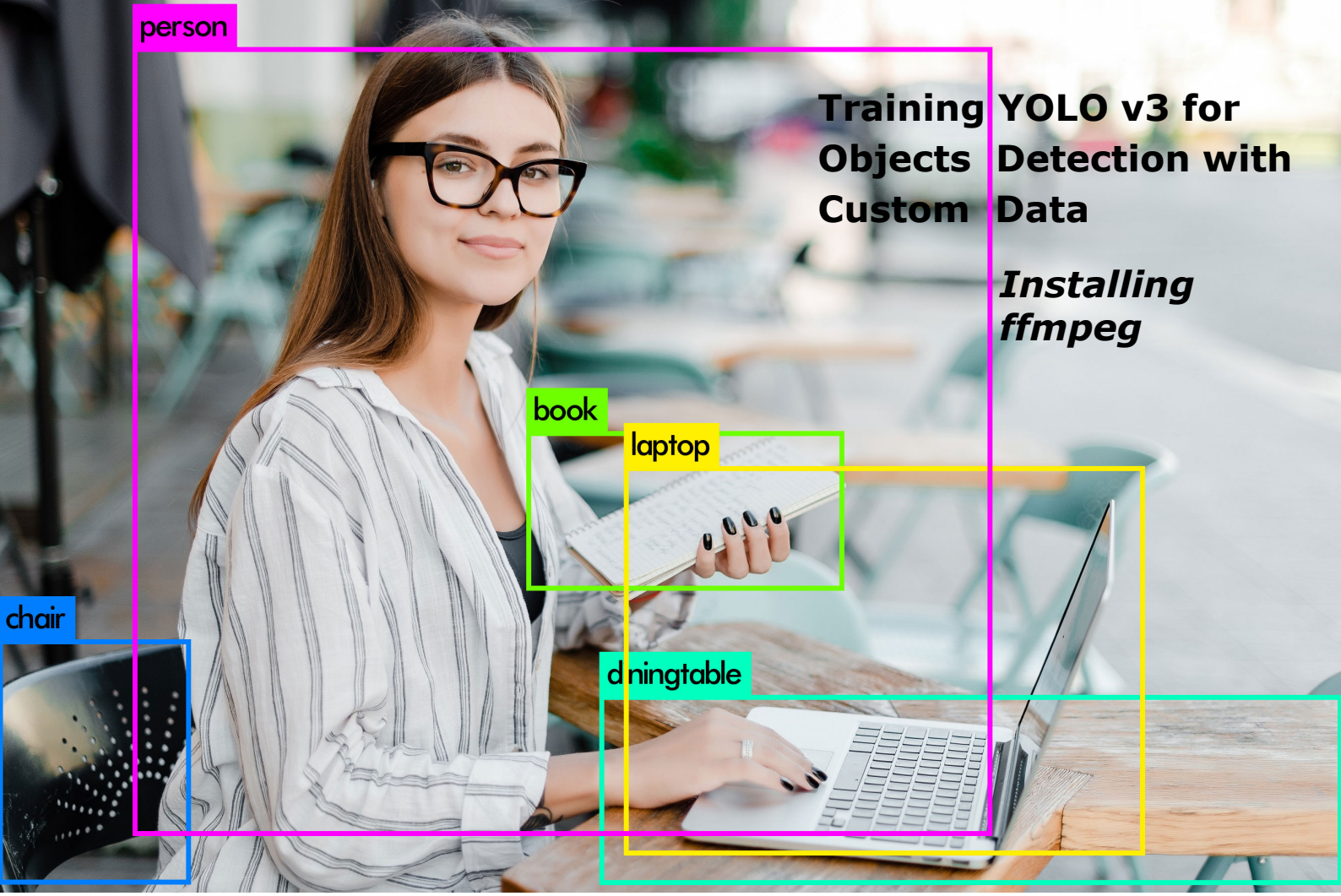

Transform video with ffmpeg command line tool

Criteria:

- ease of use
- free to use
- easy to install on **Linux** / **Windows** / **Mac**

Installing ffmpeg

It is only few steps to install and takes minutes. Anyway, if you encounter any issues with installation *ffmpeg* command line tool, let's discuss them in *Question & Answer* board. Together with course-mates we will find solution. Let's consider few examples on how to install *ffmpeg* that are also described in ffmpeg.org/download.html.

PyPI

The **easiest way** to install *ffmpeg* is by using *pip*. Activate your *Python v3* environment and run following command in *Terminal* (or *Anaconda Prompt*):

```
pip3 install ffmpeg
```

or:

```
pip install ffmpeg
```

To verify:

```
ffmpeg -version
```

Other commands to install *ffmpeg* are listed below.

Linux

ffmpeg is very popular application that is available in most Linux distribution. Activate your *Python v3* environment and run following commands in *Terminal*:

Installing on Ubuntu and its derivatives, on Debian

```
sudo apt-get update
sudo apt-get install ffmpeg
```

To verify:

```
ffmpeg -version
```

Installing on Fedora

```
sudo dnf install ffmpeg
```

To verify:

```
ffmpeg -version
```

Installing on Arch

```
sudo pacman -S ffmpeg
```

To verify:

```
ffmpeg -version
```

Windows

Follow next few steps on how to install *ffmpeg* on Windows.

- Go to https://ffmpeg.zeranoe.com/builds/ and press *Download Build* button, but don't forget to choose your version of Windows before (32-bit or 64-bit).
- Extract zip file into new folder with name *FFmpeg* into the Disc (C:)
- Now, we need to enable *ffmpeg* in the command line. To do so:
    - in the *File Explorer* right click on *This PC* and open *Advanced system settings*; choose *Environment Variables*;
    - double click on *Path* variable;
    - click *New* and type in *C:\FFmpeg\bin* into the text field and click *Ok*.

To verify, open *Command Prompt* in administrator mode and type in:

```
ffmpeg -version
```

Mac

Follow next few steps on how to install *ffmpeg* on Mac. The easiest way to install *ffmpeg* on Mac is with Homebrew.

If you don't have Homebrew installed, use following command in *Terminal* (zoom in and copy-paste):

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```

Once Homebrew is installed type in *Terminal* following:

```
brew install ffmpeg
```

To verify:

```
ffmpeg -version
```

Command to transform video into set of images

It is very easy to extract images from video file by *ffmpeg* and following command:

```
ffmpeg -i filename -vf fps=4 image-%d.jpeg
```

Where,

- **filename** is the name of video file
- **fps=4** is a number of images to get from every one second of video
- **image-%d.jpeg** is a template for images' names; the names will start from *image-1.jpg*, *image-2.jpg*, *image-3.jpg* and so on
    - if we use **image-%2d.jpeg**, then we will see names like *image-01.jpg*, *image-02.jpg*, *image-03.jpg* and so on
    - if we use **image-%3d.jpeg**, then we will see names like *image-001.jpg*, *image-002.jpg*, *image-003.jpg* and so on

Useful Links

Check out additional links with official and other useful resources for installing and using *ffmpeg* command line tool:

[1] FFmpeg – official resource with full description

[2] PyPi package – python package to install *ffmpeg* with *pip*

[3] Download ffmpeg – officially recommended packages and executable files for installation on Linux, Windows and Mac

[4] ffmpeg Documentation - *ffmpeg* documentation of usage