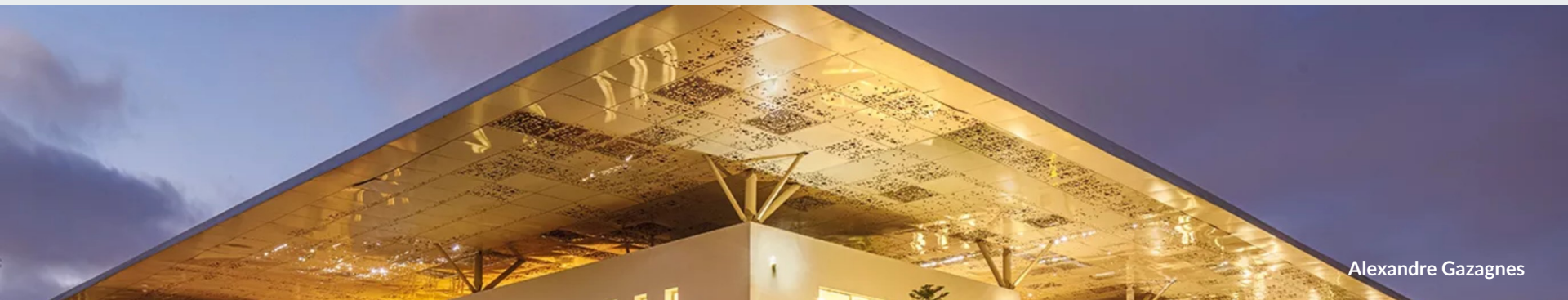


Modern NLP

**Based on Deep Learning and Language models.
Day 1 Morning**



1st Day

1. Morning (~ 2h)
 - } ML – IA – NLP – A gentle introduction
 - } Python, Anaconda, Jupyter, Git, Github : All the tools you need
 - } Python 101 – A very small remainder

2. Afternoon (~ 4h)
 - } ML 101 – A very first implementation
 - } Text Processing – From words to vectors
 - } Basic and Advanced NLP techniques

First ... Let's Talk !



About You and Me



About Tech. Knowledge

1. AI
2. Machine Learning
3. Data Science
4. Deep learning
5. NLP
6. GPT
7. Robotics
8. Supervized
9. Reinforcement Learning
10. Skynet
11. Alphago
12. Deep Blue

Any Business ideas, techs projects to bring in ?

1. .
2. .
3. .
4. .

10 richest vs 10 biggest companies

https://en.wikipedia.org/wiki/The_World%27s_Billionaires

https://en.wikipedia.org/wiki/List_of_public_corporations_by_market_capitalization

Who is this guy ?

1. My great great great grandfather
2. Just a random guy
3. Alan Turing
4. Nobody, He was created by some random AI tool



Tools



Google Colab

Tools Help



+ Code

+ Text

Copy to Drive

Connect



Use Gemini and ChatGPT to learn from two capable teachers

Use Google's latest model release, Gemini, to teach you what you want to know and compare those with ChatGPT's responses.

The models are specifically prompted not to generate extra text to make it easier to compare any differences.

> Configure Gemini API key



`gemini_api_secret_name:` "GOOGLE_API_KEY"

[Show code](#)

> Configure OpenAI API key

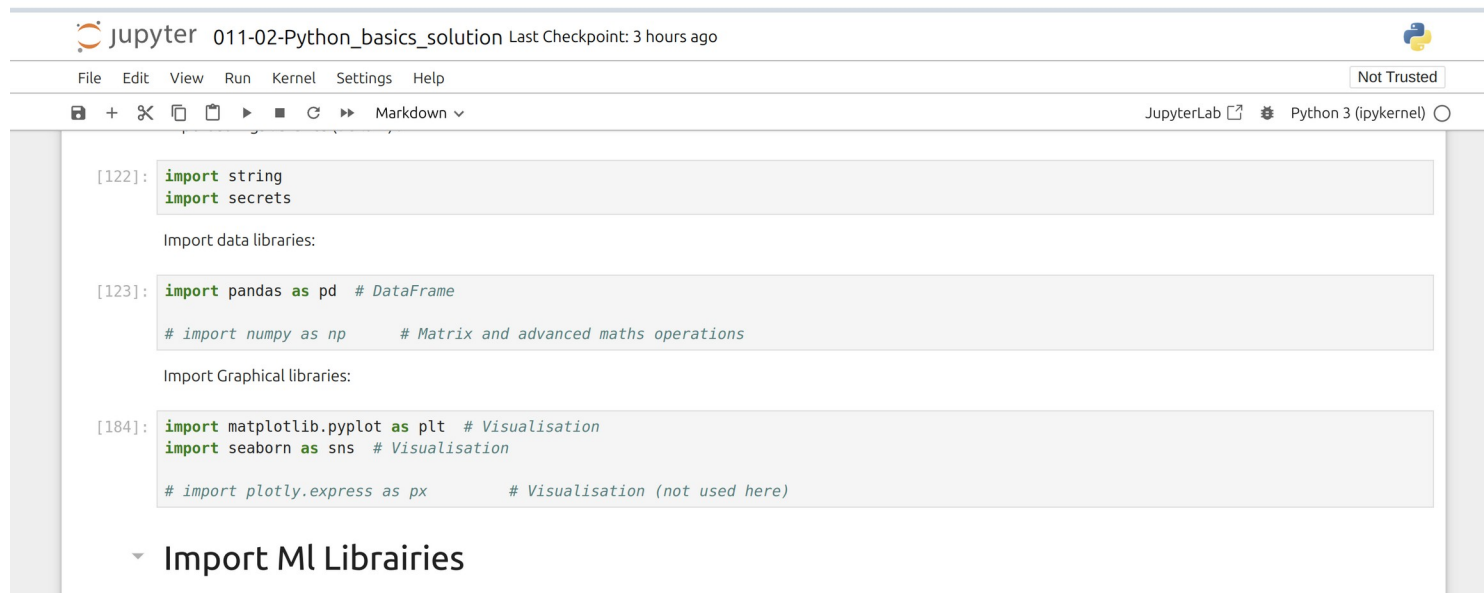


`openai_api_secret_name:` "OPENAI_API_KEY"

[Show code](#)

> Ask a question!

Anaconda & JupyterLab



The screenshot shows the JupyterLab interface. At the top, the title bar reads "jupyter 011-02-Python_basics_solution Last Checkpoint: 3 hours ago". Below this is a menu bar with "File", "Edit", "View", "Run", "Kernel", "Settings", and "Help". To the right of the menu bar is a "Not Trusted" button. Below the menu bar is a toolbar with icons for file operations and a "Markdown" dropdown. The main area displays three code cells. The first cell, labeled "[122]:", contains the code `import string` and `import secrets`, followed by the text "Import data libraries:". The second cell, labeled "[123]:", contains the code `import pandas as pd # DataFrame`, `# import numpy as np`, and `# Matrix and advanced maths operations`, followed by the text "Import Graphical libraries:". The third cell, labeled "[184]:", contains the code `import matplotlib.pyplot as plt # Visualisation` and `import seaborn as sns # Visualisation`, followed by the code `# import plotly.express as px` and `# Visualisation (not used here)`. Below the code cells is a section titled "Import ML Librairies" with a downward arrow.

```
[122]: import string
import secrets

Import data libraries:

[123]: import pandas as pd # DataFrame

# import numpy as np      # Matrix and advanced maths operations

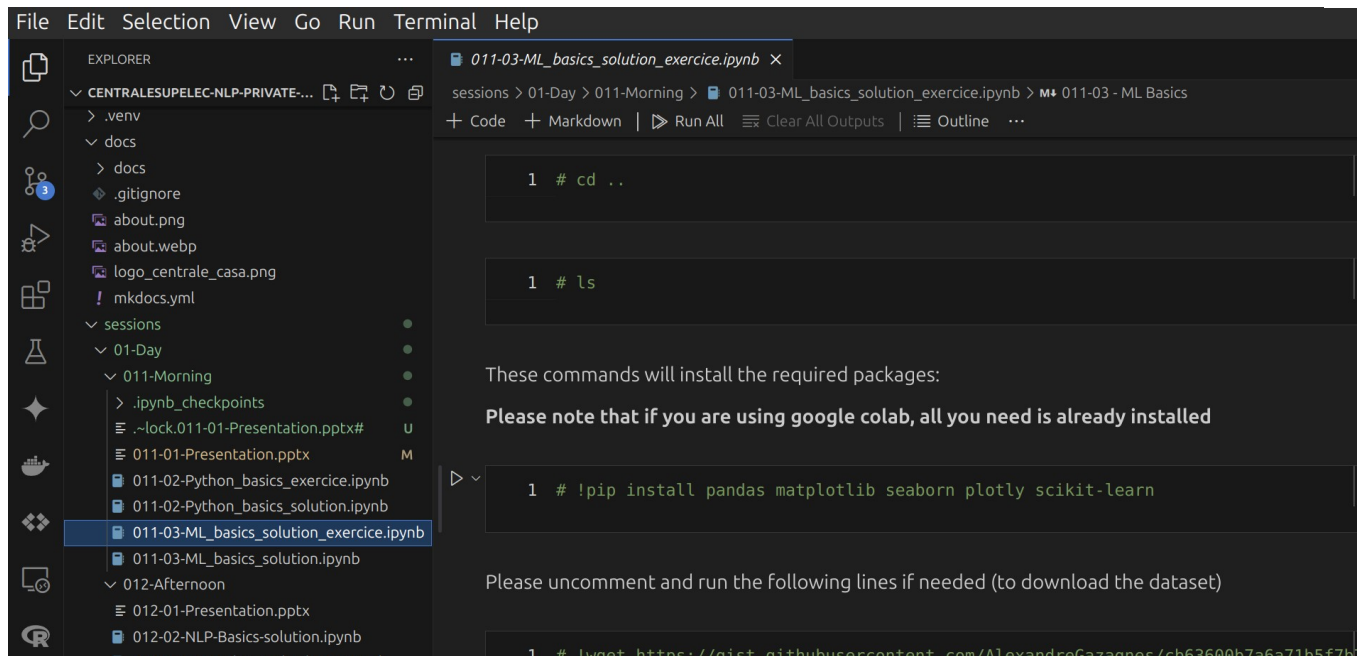
Import Graphical libraries:

[184]: import matplotlib.pyplot as plt # Visualisation
import seaborn as sns # Visualisation



# import plotly.express as px      # Visualisation (not used here)
```

▼ Import ML Librairies


VS Code & PyCharm (most advanced users)







Git & GitHub


 AlexandreGazagnes / CentraleSupElec-NLP-Private-Ressources 


[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Security](#) [Insights](#) [Settings](#)


 **CentraleSupElec-NLP-Private-Ressources** Private Unwatch 1


 main 


 1 Branch  0 Tags








[Add file](#) 

[Code](#) 

 **AlexandreGazagnes** update

662766d · 39 minutes ago  8 Commits

 .github/workflows	update	5 hours ago
 .utils	update	5 hours ago
 docs	update	5 hours ago
 sessions	update	39 minutes ago
 tests	update	5 hours ago

Python – 101



Practice !



ML - 101

Practice !
