Installation of Anaconda and Jypyter Notebook

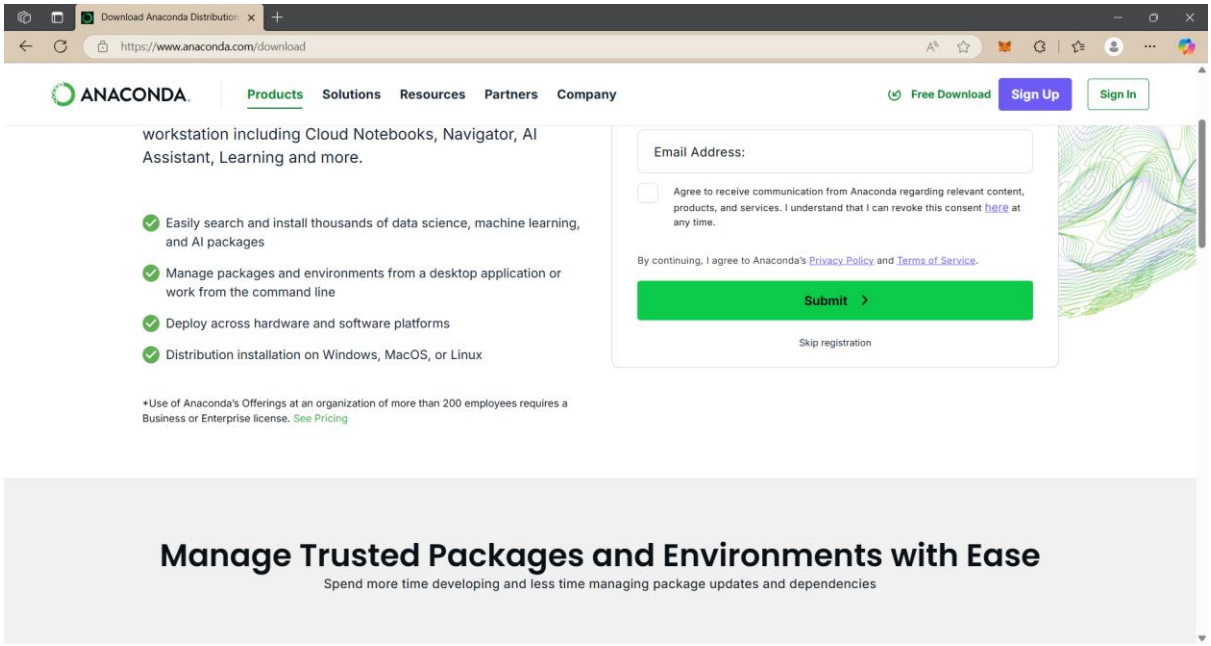


Fig 1: Official website of Anaconda. Give your email address here of the filed to go to the download page.

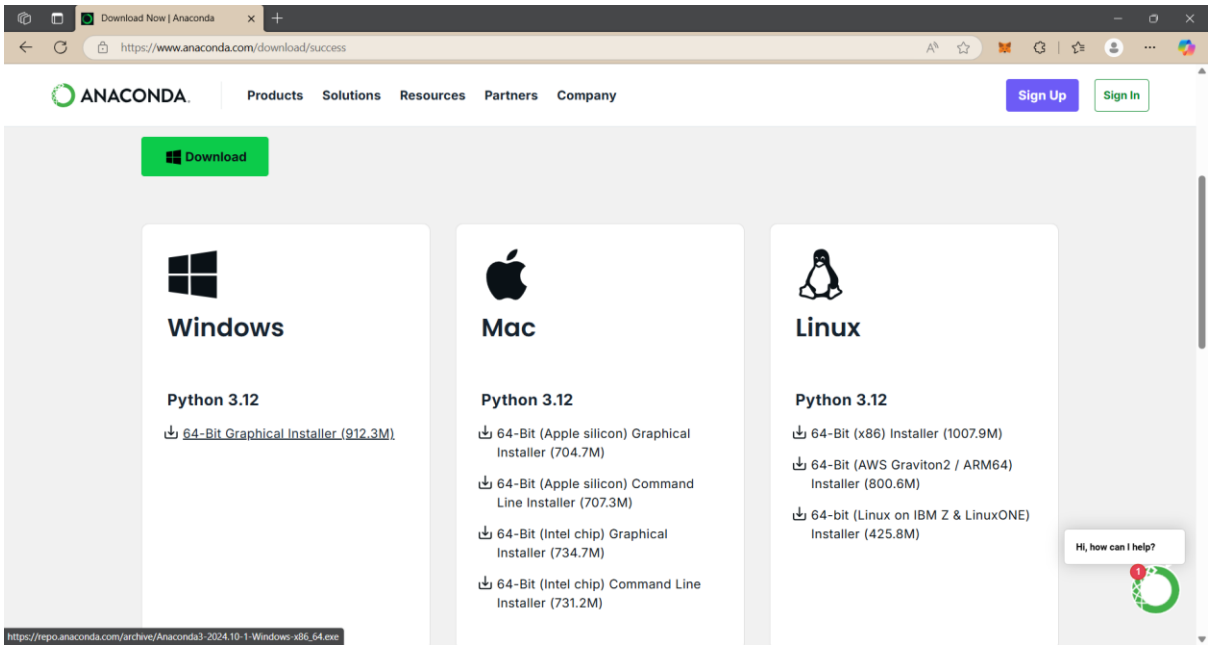


Fig 2: Download page for Anaconda where links for download are available.

My System Specifications:

OS	Windows 11
RAM	16 GB
GPU	NVIDIA Geforce GTX 1050
SSD	500 GB
PROCESSOR	Intel i5 12th gen

Choose the windows version as per system specifications.

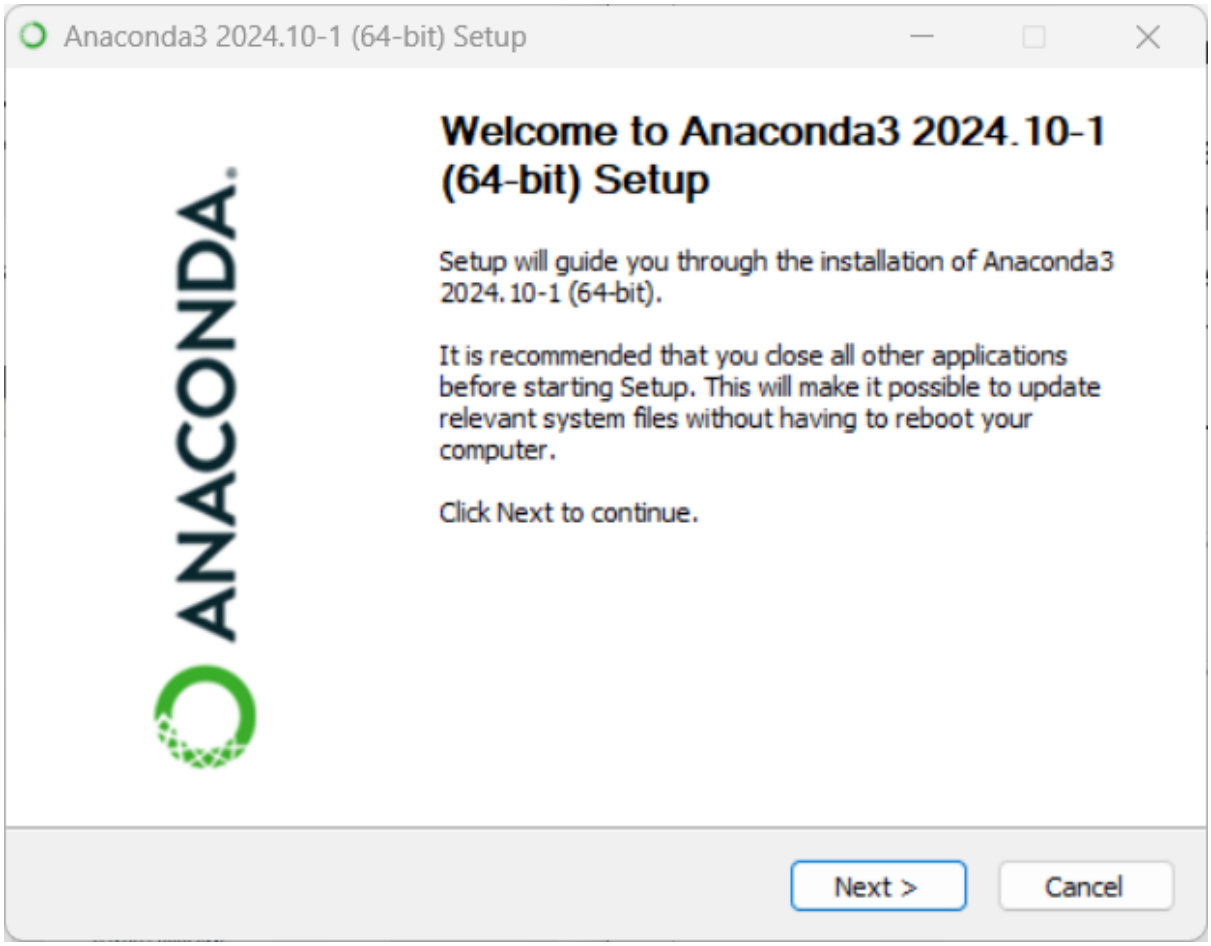


Fig 3 : Installation page for Anaconda Navigator

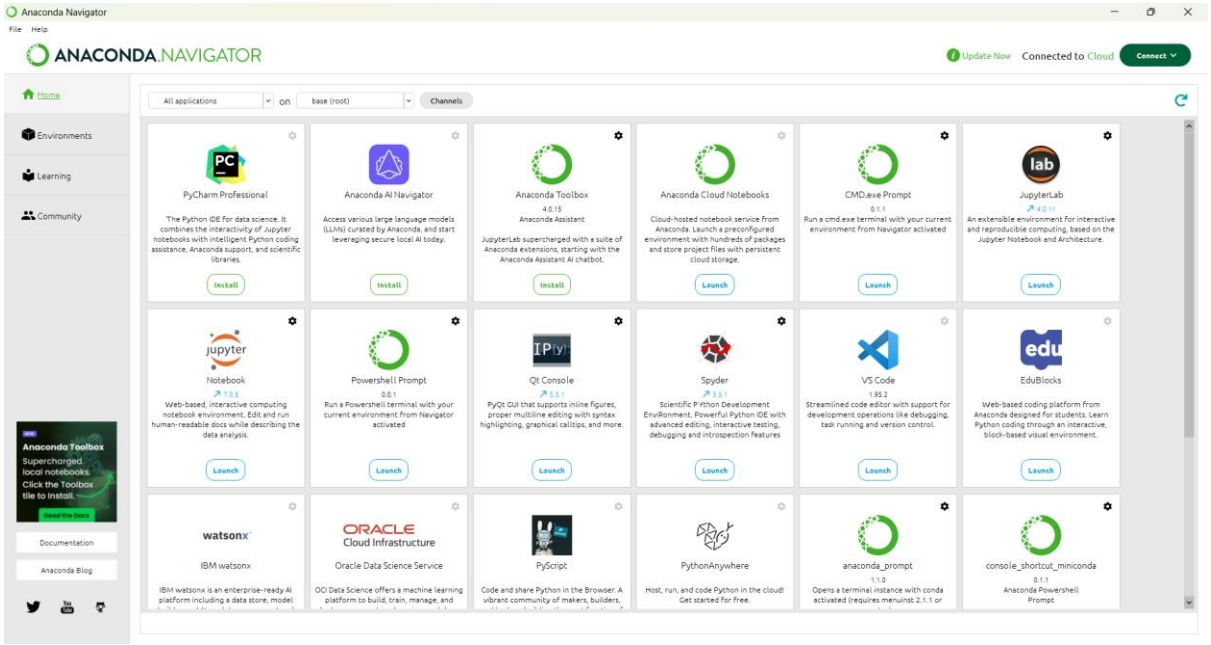


Fig 4: Home page of Anaconda Navigator after installation.

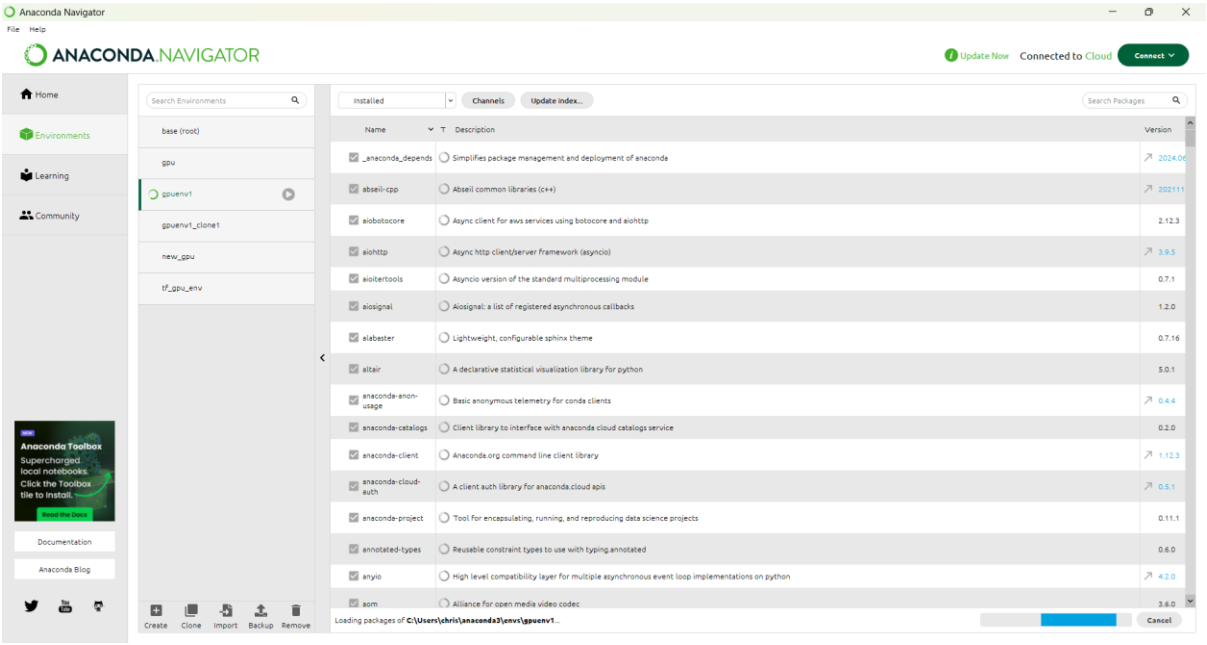


Fig 5: Environment page for the listing of Environments created for the lab. Packages used in each environment are listed on the right-hand side of the environments.

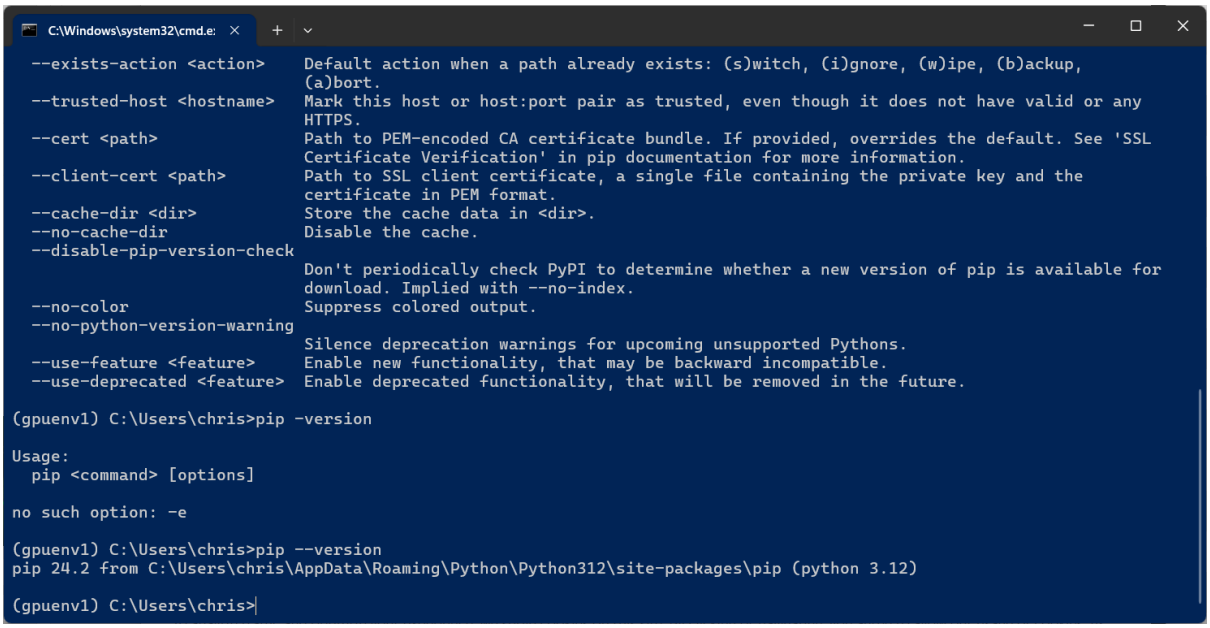
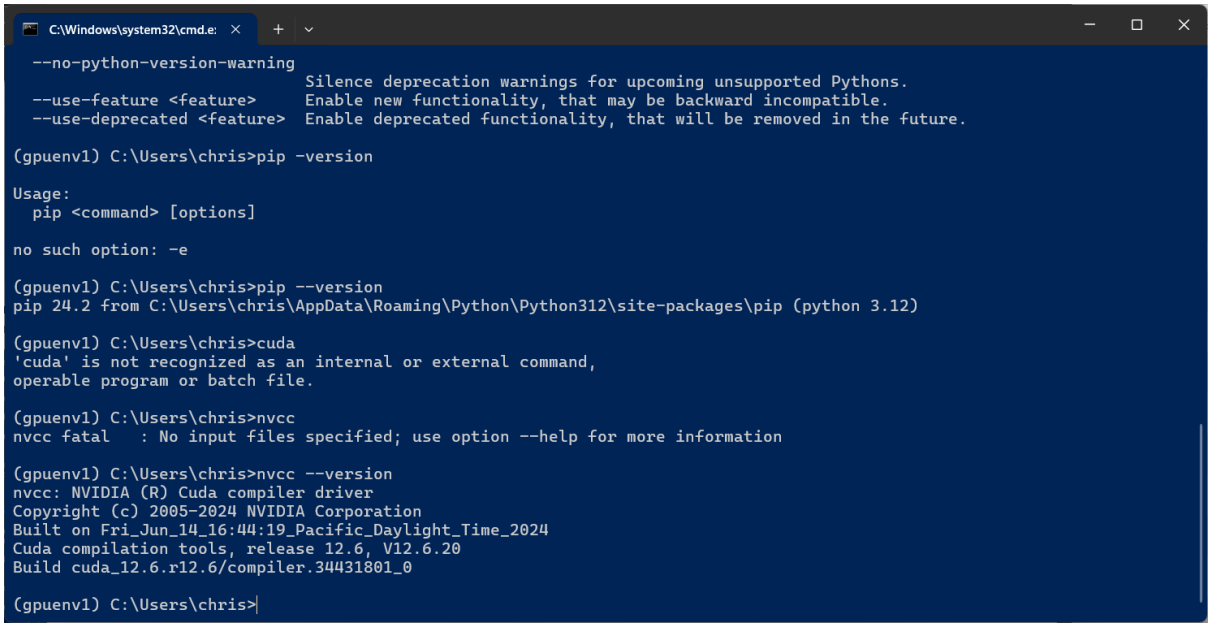


Fig 6: Terminal running the current python environment.



nvcc: NVIDIA (R) Cuda compiler driver

Copyright (c) 2005-2024 NVIDIA Corporation

Built on Fri_Jun_14_16:44:19_Pacific_Daylight_Time_2024

Cuda compilation tools, release 12.6, V12.6.20

Build cuda_12.6.r12.6/compiler.34431801_0

Fig 8: Terminal showing Cuda version installed

VS code installation

Fig 9: VS code download page.

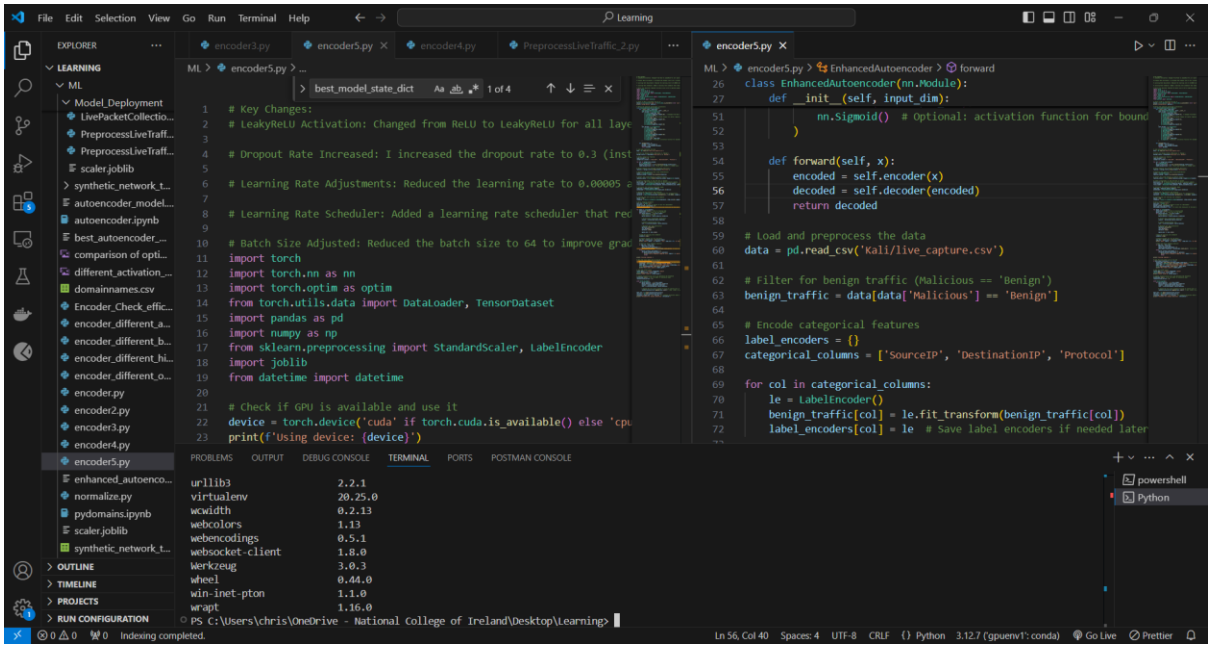


Fig 10: VS code running the code.

Google Colab Configuration

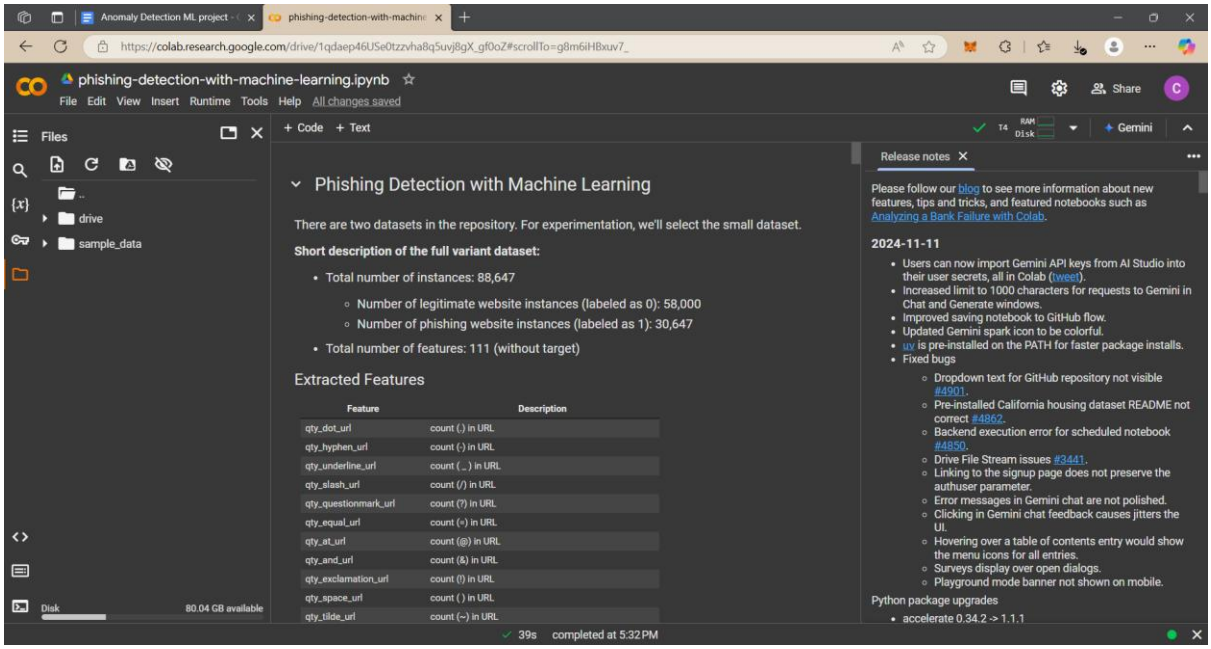


Fig 11: Colab file containing the source for project.

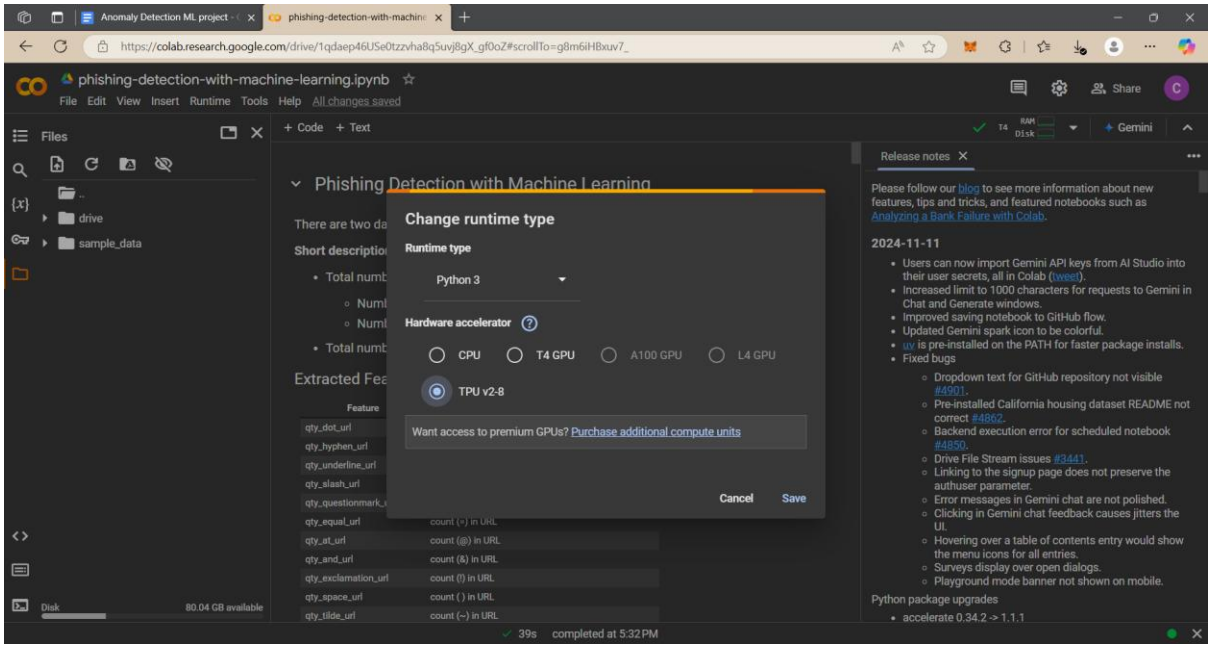


Fig 12: Colab Configuration to use GPU.

GPU Configuration

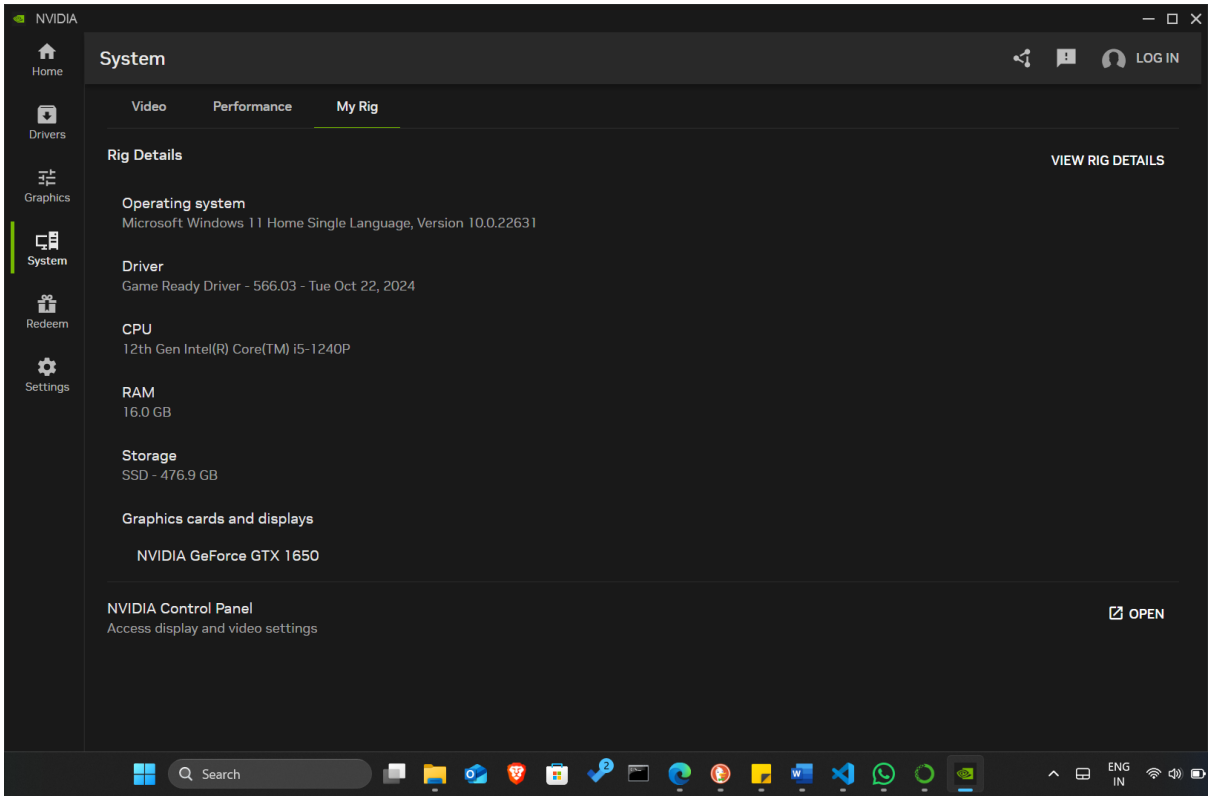


Fig 13: System configuration for the project purpose.

Installation of Packages

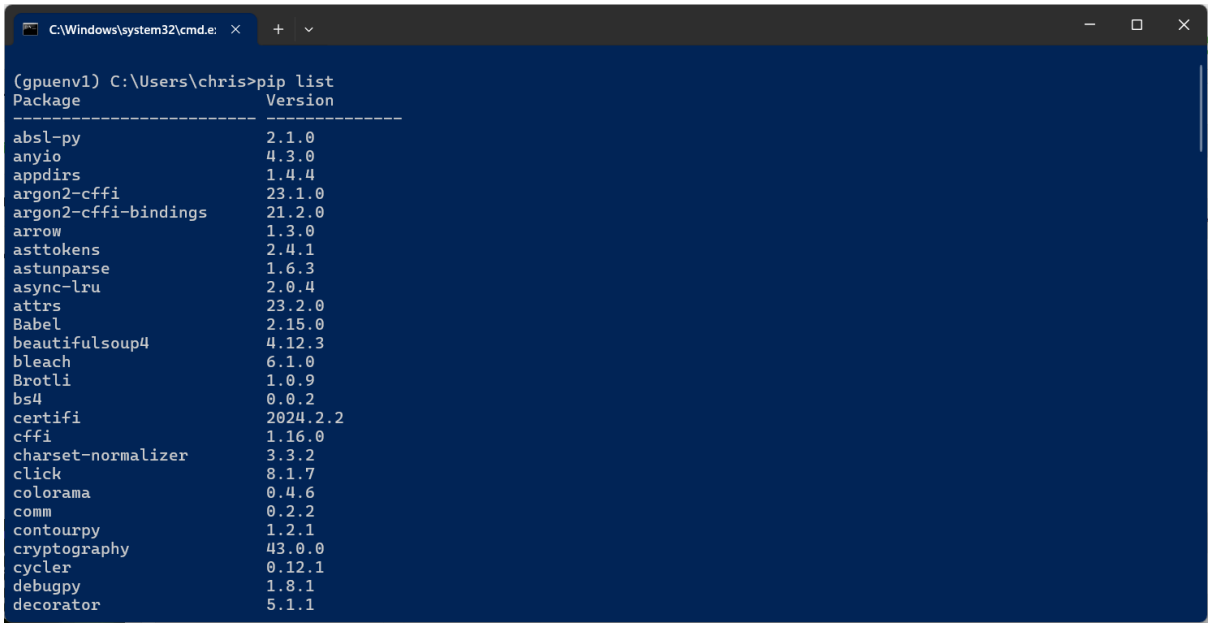


Fig 14: Python environment listing all the packages installed.

Library	Version	Library	Version
absl-py	2.1.0	ipython	8.24.0
anyio	4.3.0	isoduration	20.11.0
appdirs	1.4.4	jedi	0.19.1
argon2-cffi	23.1.0	Jinja2	3.1.4
argon2-cffi-bindings	21.2.0	joblib	1.4.0
arrow	1.3.0	json5	0.9.25
asttokens	2.4.1	jsonpointer	2.4
astunparse	1.6.3	jsonschema	4.22.0
async-lru	2.0.4	jsonschema-specifications	2023.12.1
attrs	23.2.0	jupyter_client	8.6.1
Babel	2.15.0	jupyter_core	5.7.2
beautifulsoup4	4.12.3	jupyter-events	0.10.0
bleach	6.1.0	jupyter-lsp	2.2.5
Brotli	1.0.9	jupyter_server	2.14.0
bs4	0.0.2	jupyter_server_terminals	0.5.3
certifi	2024.2.2	jupyterlab	4.2.0
cffi	1.16.0	jupyterlab_pygments	0.3.0
charset-normalizer	3.3.2	jupyterlab_server	2.27.1
click	8.1.7	keras	3.5.0

Library	Version	Library	Version
colorama	0.4.6	kiwisolver	1.4.5
comm	0.2.2	libclang	18.1.1
contourpy	1.2.1	lxml	5.3.0
cryptography	43.0.0	Markdown	3.6
cycler	0.12.1	markdown-it-py	3.0.0
debugpy	1.8.1	MarkupSafe	2.1.5
decorator	5.1.1	matplotlib	3.8.4
defusedxml	0.7.1	matplotlib-inline	0.1.7
distlib	0.3.8	mdurl	0.1.2
english-words	2.0.1	mistune	3.0.2
executing	2.0.1	mkl_fft	1.3.10
fastjsonschema	2.19.1	mkl_random	1.2.7
filelock	3.13.1	mkl-service	2.4.0
flatbuffers	24.3.25	ml-dtypes	0.4.0
fonttools	4.51.0	mpmath	1.3.0
fqdn	1.5.1	namex	0.0.8
fsspec	2024.9.0	nbclient	0.10.0
gast	0.6.0	nbconvert	7.16.4
google-pasta	0.2.0	nbformat	5.10.4
grpcio	1.65.4	nest-asyncio	1.6.0
h11	0.14.0	networkx	3.2.1
h5py	3.11.0	nltk	3.8.1
httpcore	1.0.5	notebook_shim	0.2.4
httpx	0.27.0	numpy	1.26.4
idna	3.7	opt-einsum	3.3.0

VM Installation and configuration

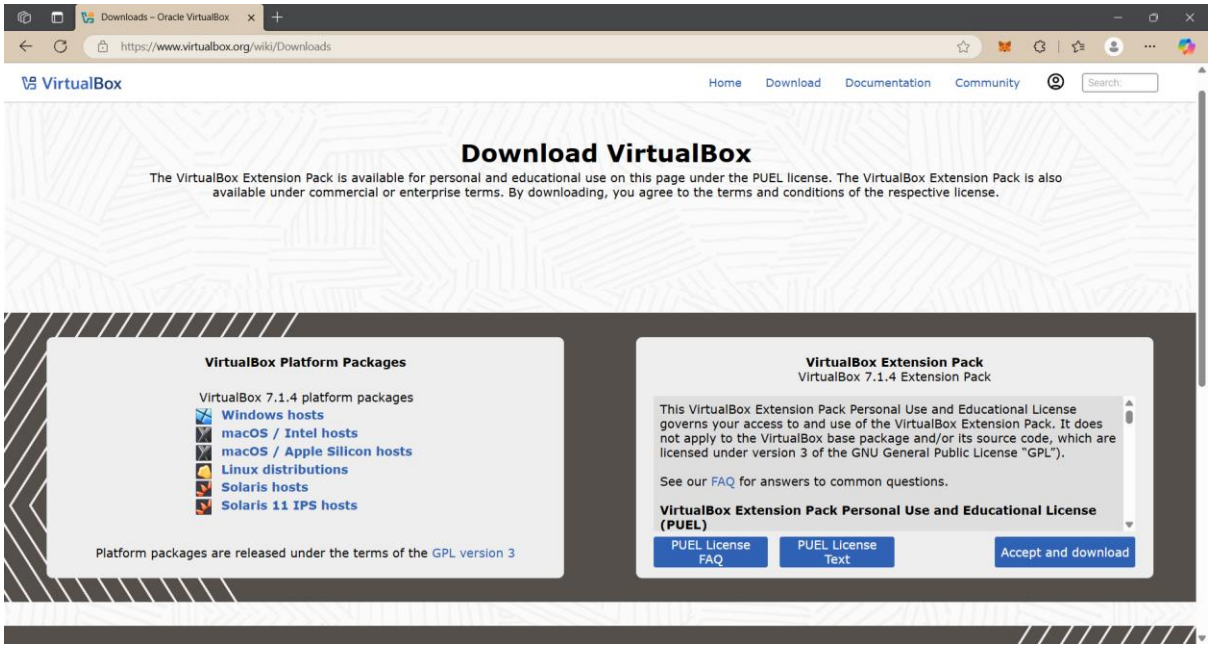


Fig 15: Virtual Box download page from internet.

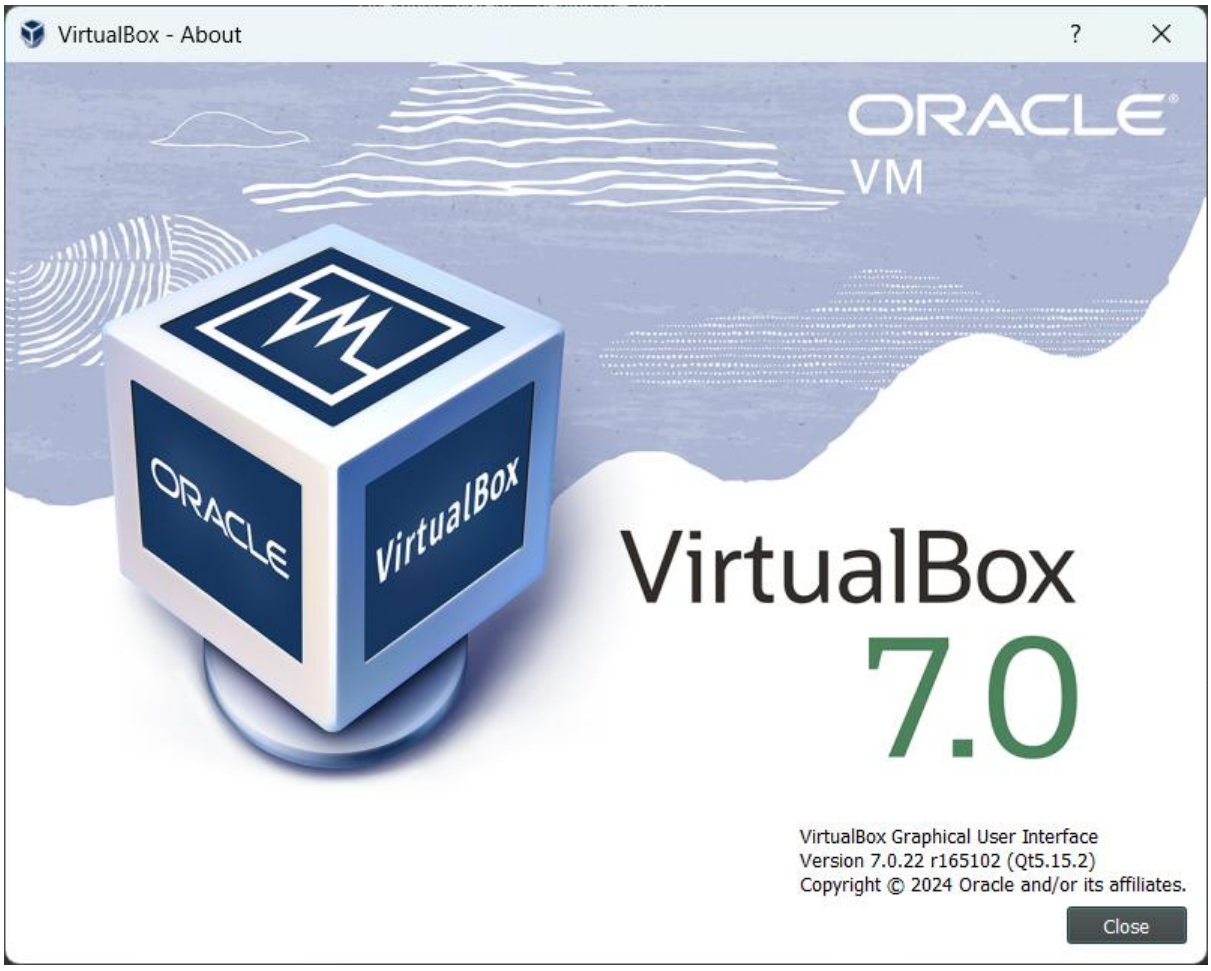


Fig 16: Virtual Box running.

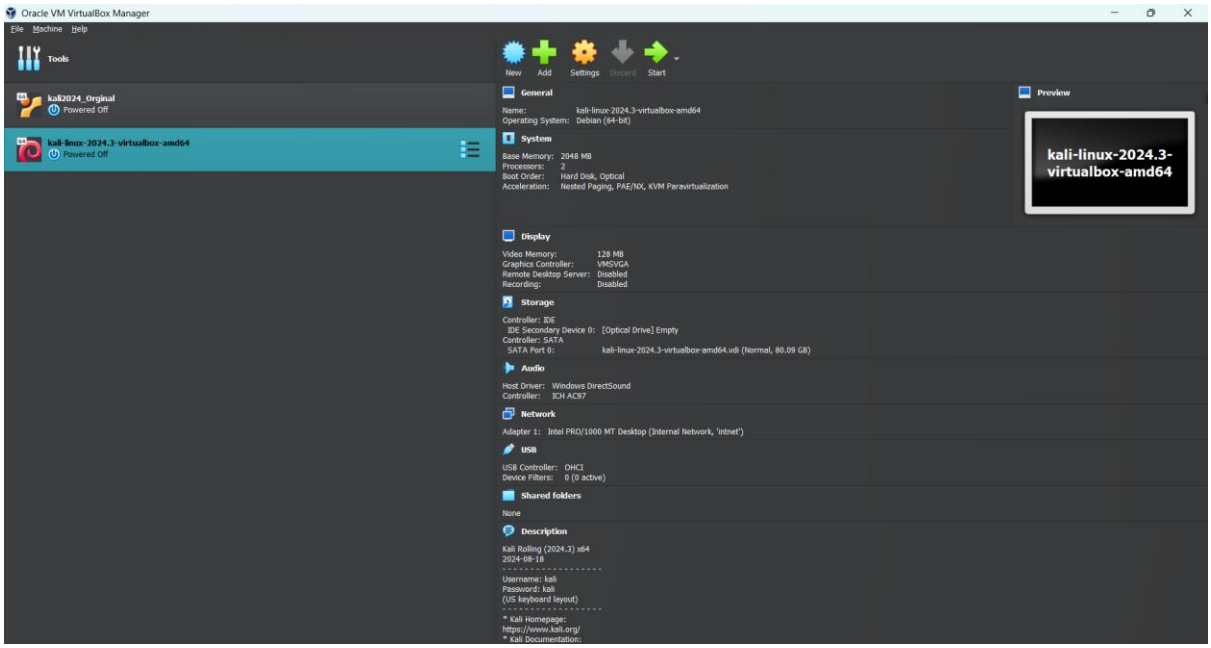


Fig 18: VM listing the virtual machine created for the research purpose.