

# Configuration Manual

MSc Research Project  
MscDAD\_A\_JAN\_24\_O

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**National College of Ireland**  
**MSc Project Submission Sheet**  
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**Programme:** MSCDAD\_A\_Jan24\_O **Year:** 2024  
**Module:** MSc Research Project  
**Lecturer:** Prof Aaloka Anant  
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**Project Title:** Stacking Ensemble Approach towards Predicting Irish-Real Estate  
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I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

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**Signature:** Dipesh Patel

**Date:** 11/12/2024

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Assignments that are submitted to the Programme Coordinator Office must be placed into the assignment box located outside the office.

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# Configuration Manual

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## 1 Device Hardware Specification

To run mentioned project first be note that if the Harward ware requirement satisfied.

Host device	Dell inspiration 7000
Processor	2.80 GHz Intel i7-7700HQ
RAM Memory	8GB
Storage:	512GB
Graphics	Nvidia 1050TI
System type	64bit

## 2 Installation Jupyter Notebook

**Step 1:-** Go to Anaconda Navigator web portal link:-

<https://www.anaconda.com/products/navigator> and click on “Download Anacond” as Shown in Figure 1

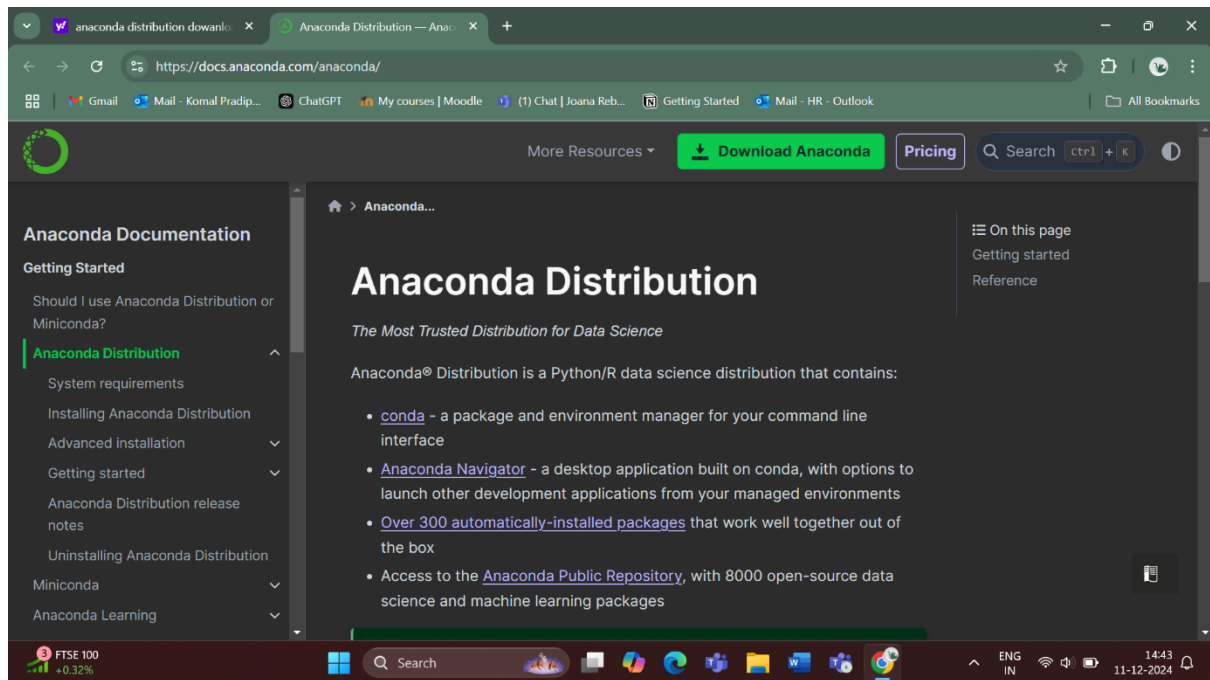


Figure 1 Anaconda navigator web portal

**Step2:-** Enter your email address to receive the download link on your mail id.shown in figure 2.

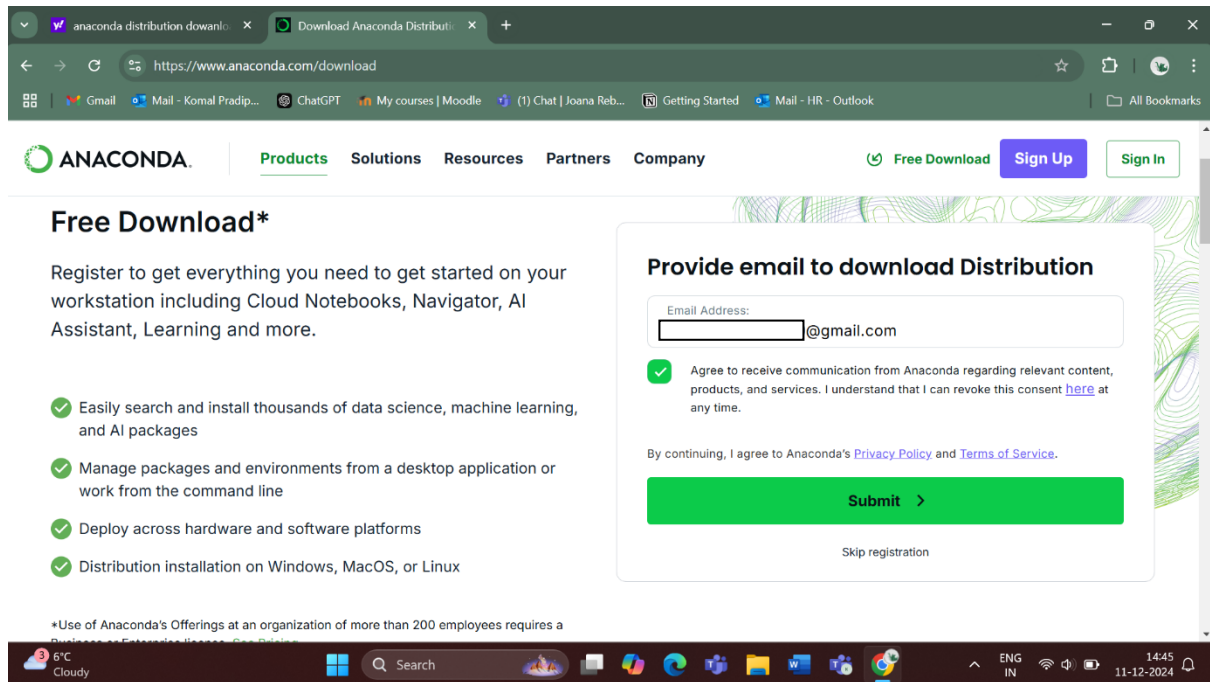
The screenshot shows the Anaconda website's download page. On the left, under 'Free Download\*', there is a list of benefits: easily searching and installing thousands of data science packages, managing packages from a desktop or command line, deploying across hardware and software platforms, and distribution installation on Windows, MacOS, or Linux. On the right, a 'Provide email to download Distribution' form is displayed. It includes an 'Email Address' field with '@gmail.com' entered, a checked checkbox for agreeing to receive communication, and a 'Submit' button. Below the button is a link to 'Skip registration'. The browser's address bar shows 'https://www.anaconda.com/download'.

Figure 2 image of email registration form.

**Step 3:-**After receiving the mail click on download and select the Anaconda file based on your operating system. Shown in Figure 3.

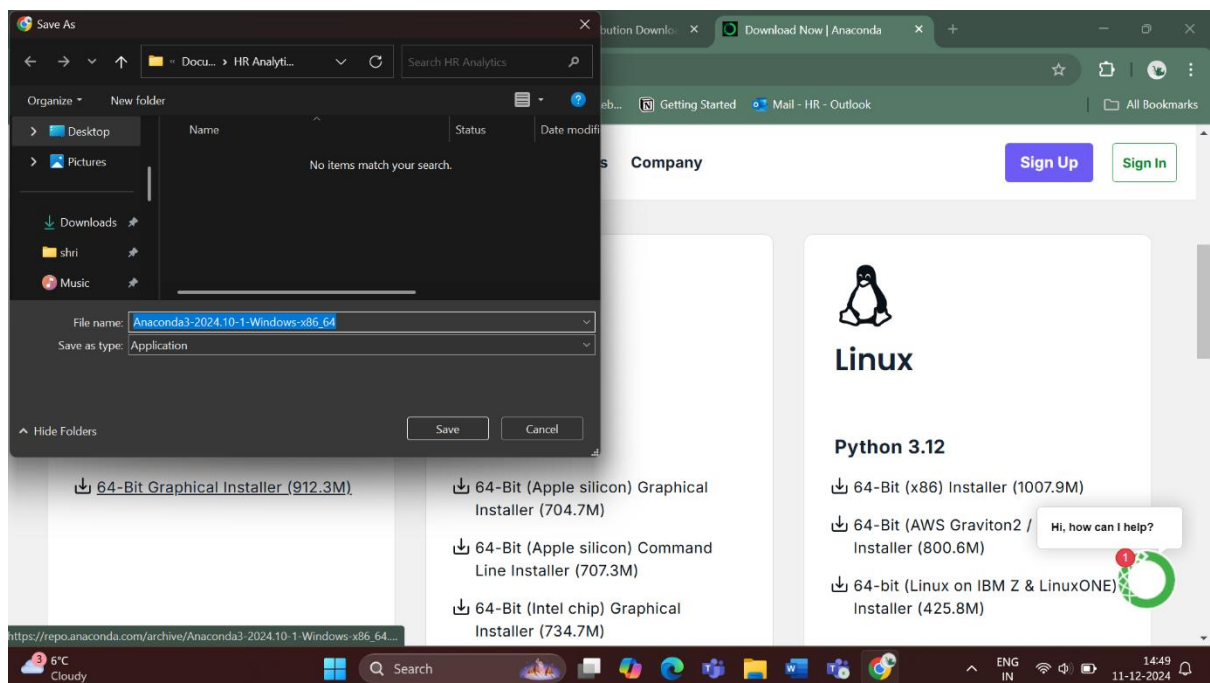


Figure 3 file Installation

**Step 4:-**after downloading the file install the file in the drive of your choice. After installation the anaconda home screen will appear. Shown in figure 4.then Search for Jupyter notebook and click on button launch.

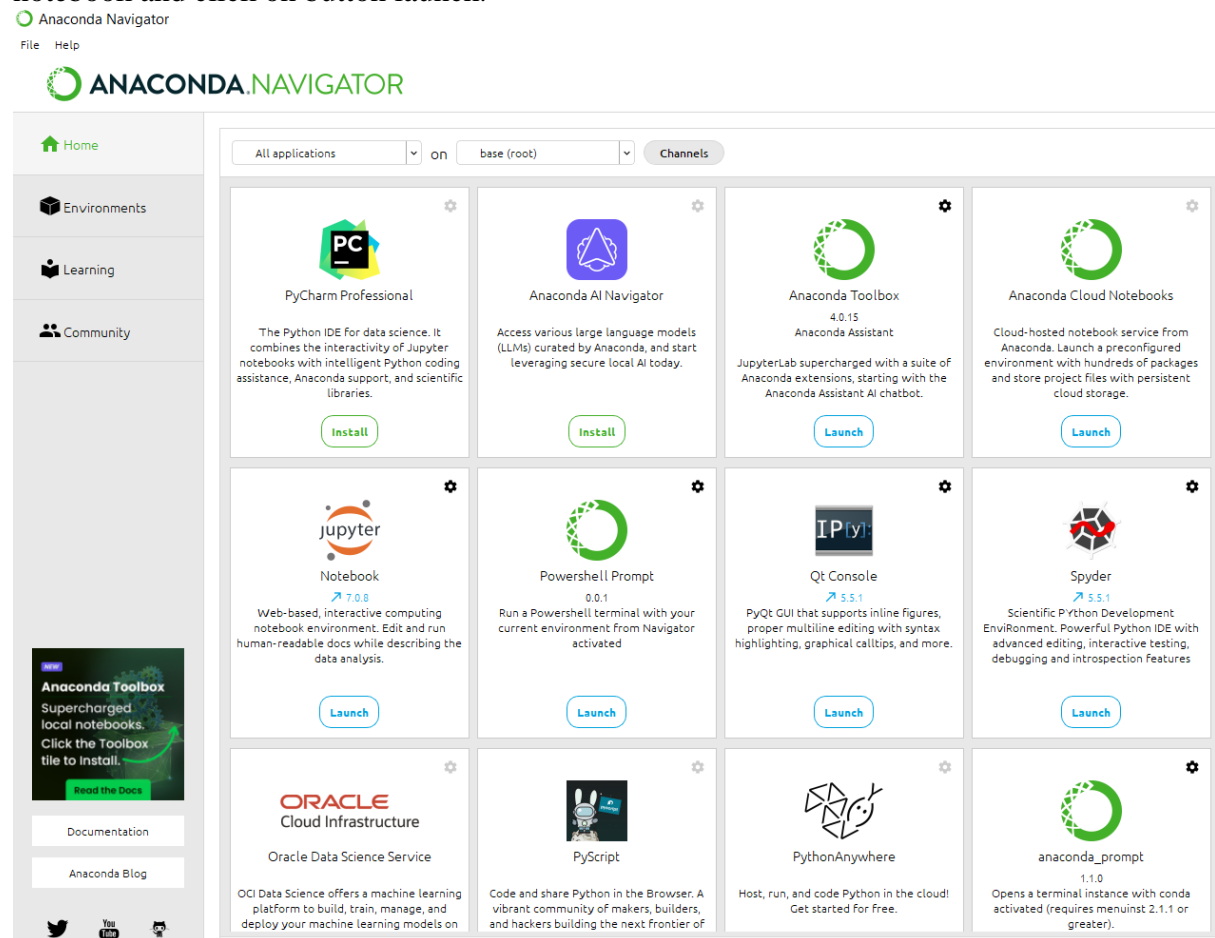


Figure 4 Home screen of anaconda navigator.

**Step 5:-** After executing the Jupyter notebook user can see the notebook home page and location tab, the location tab will change based on the user choices. The location tab is marked for better understanding in figure 5. Be Shure that the file zip file that you installed in this same location with its supporting file and then open the jupyter notebook.

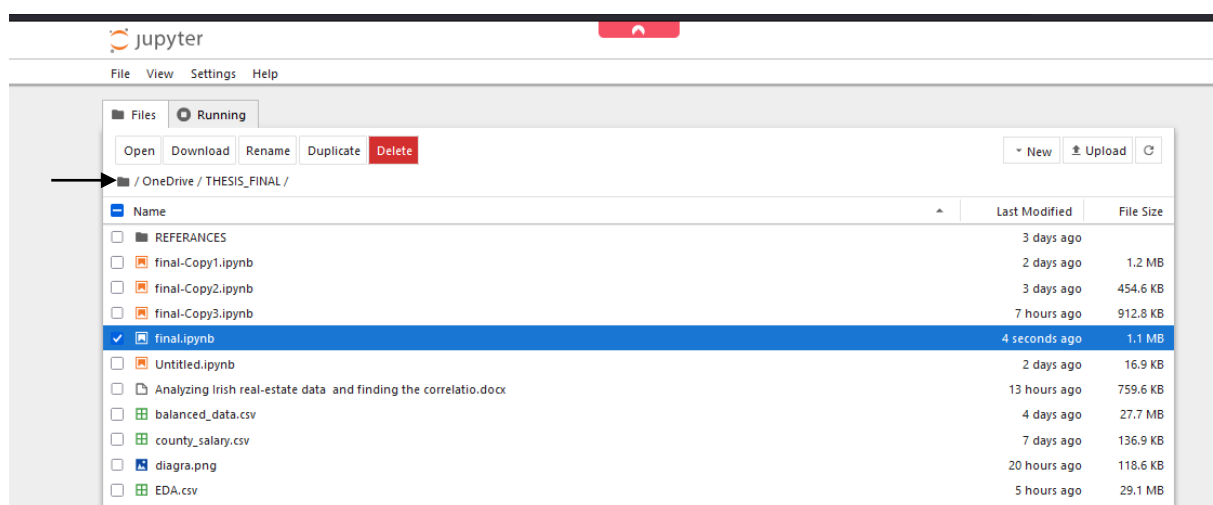
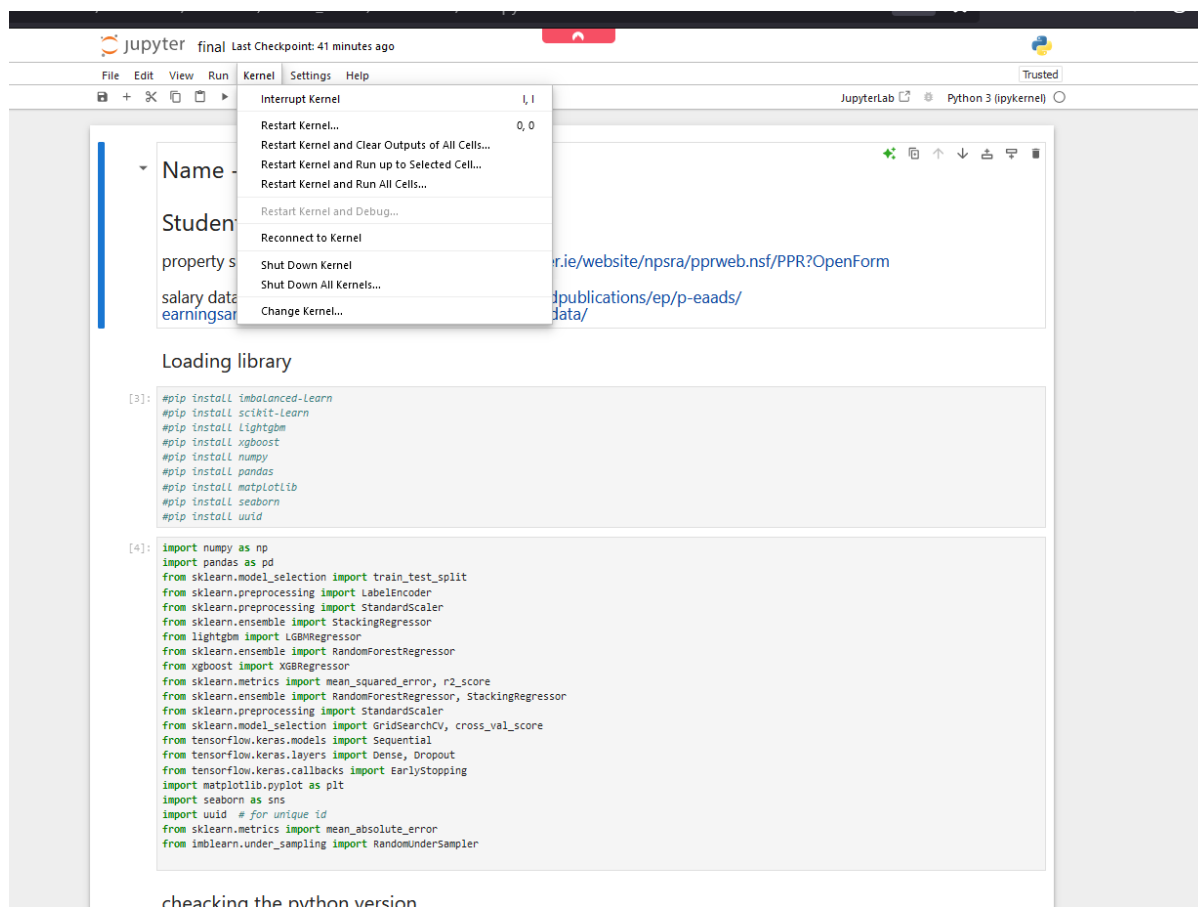


Figure 5 image of jupyter notebook homescreen

**Step 6:-** After opening the ipynb file you can restart the kernal and run all the conmand from the beginning or you can scroll down and see the previous result shown in figure 6.



### 3 Official Library setup

To run any code first check for the required library the libraries are as follows even thow if the library is same but there is difference in version there might be a chance of getting error. Because with the updation of library the API or dependencies changes and function argument or return type might change. current python version is 3.12.4 as shown in figure 7.

Library	Use
#pip install imbalanced-learn	Used for handling imbalanced dataset
#pip install scikit-learn	Used for preposing
#pip install lightgbm	Its used for gradient boosting
#pip install xgboost	Another gradient boosting library
#pip install numpy	Fundamental library for numerical computing in python
#pip install pandas	Used for data manipulation
#pip install matplotlib	Used for creating statics,and visualization
#pip install uuid	Useful for creating unique key

```
Python version
3.12.4 | packaged by Anaconda, Inc. | (main, Jun 18 2024, 15:03:56) [MSC v.1929 64 bit (AMD64)]
Version info.
sys.version_info(major=3, minor=12, micro=4, releaselevel='final', serial=0)
```

Figure 7 Python version on anaconda