

Configuration Manual

MSc Research Project
MSc in Data Analytics

Chollety Manoj Kumar
Student ID: X23227541

School of Computing
National College of Ireland

Supervisor: Jorge Basilio

National College of Ireland
MSc Project Submission Sheet
School of Computing



Student Name: Chollety Manoj Kumar
Student ID: X23227541
Programme: MSc in Data Analytics **Year:** 2025
Module: MSc Research Project
Lecturer: Jorge Basilio
Submission Due Date: 14 September 2025
Project Title: Optimizing Machine Learning Models for Real-Time Detection of Fake Product Reviews on E-commerce

Word Count: 268 **Page Count:** 5

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.

ALL internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

Signature: Chollety Manoj Kumar

Date: 14-09-2025

PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST

Attach a completed copy of this sheet to each project (including multiple copies)	<input type="checkbox"/>
Attach a Moodle submission receipt of the online project submission, to each project (including multiple copies).	<input type="checkbox"/>
You must ensure that you retain a HARD COPY of the project, both for your own reference and in case a project is lost or mislaid. It is not sufficient to keep a copy on computer.	<input type="checkbox"/>

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

Office Use Only	
Signature:	
Date:	
Penalty Applied (if applicable):	

Configuration Manual

Chollety Manoj Kumar
Student ID: X23227541

1. Hardware and Software Configuration

Hardware Requirements:

Minimum 8 GB RAM (Recommended 16 GB or higher)

At least 2 CPU cores (Intel i5 or equivalent)

5 GB available disk space

Internet (for package installation and data)

Software Requirements:

Operating System: Windows 10/11, MacOS X or Linux

Python Version: 3.9 or higher

Running in the Jupyter Notebook (Anaconda | Standalone)

2. Development Environment

Note: This project has been developed and tested on

IDE/Editor: Jupyter Notebook (Anaconda Navigator)

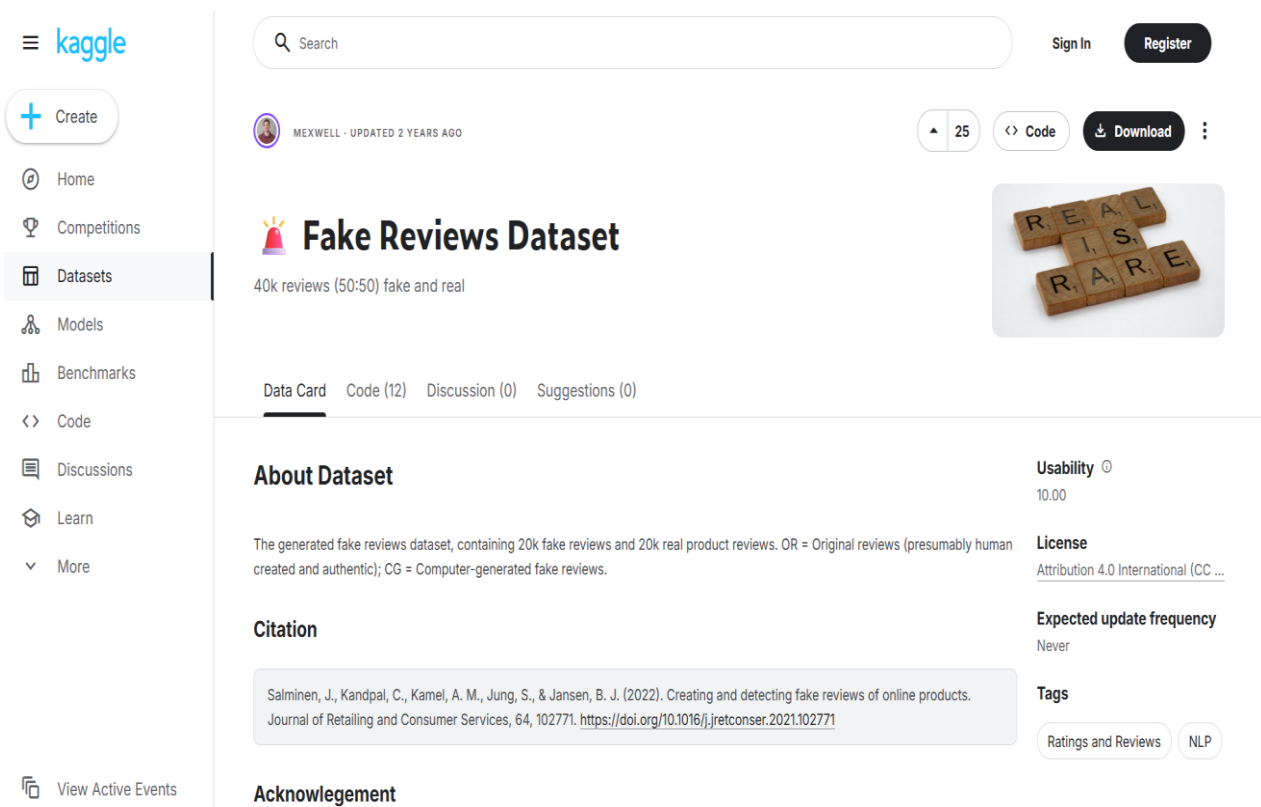
Environment Manager: Anaconda (version 2023. x)

Notebook Name: Research.ipynb

Execution Mode: Local (Using Jupyter Notebook on Desktop)

3 . Download Fake Reviews Dataset from Kaggle

You can access the dataset using the following [link](#)



The screenshot shows the Kaggle interface for the 'Fake Reviews Dataset'. On the left is a navigation sidebar with options like Home, Competitions, Datasets, Models, Benchmarks, Code, Discussions, Learn, and More. The main content area features a search bar, a user profile for 'MEXWELL' (updated 2 years ago), and a 'Download' button. The dataset title 'Fake Reviews Dataset' is prominently displayed, along with a description: '40k reviews (50:50) fake and real'. Below this, there are tabs for 'Data Card', 'Code (12)', 'Discussion (0)', and 'Suggestions (0)'. The 'About Dataset' section explains that the dataset contains 20k fake and 20k real reviews, with 'OR' for original and 'CG' for computer-generated reviews. A citation is provided for Salminen et al. (2022). On the right, metadata includes 'Usability' (10.00), 'License' (Attribution 4.0 International), 'Expected update frequency' (Never), and 'Tags' (Ratings and Reviews, NLP). An image of wooden blocks spelling 'REAL' and 'RARE' is also visible.

Figure 1. Fake Reviews Dataset

4. Jupyter Notebook Setup

4.1 Install Anaconda

Anaconda comes bundled with Jupyter Notebook, Python, and useful libraries.

1. Download Anaconda from <https://www.anaconda.com/products/distribution>
2. Install and launch **Anaconda Navigator**

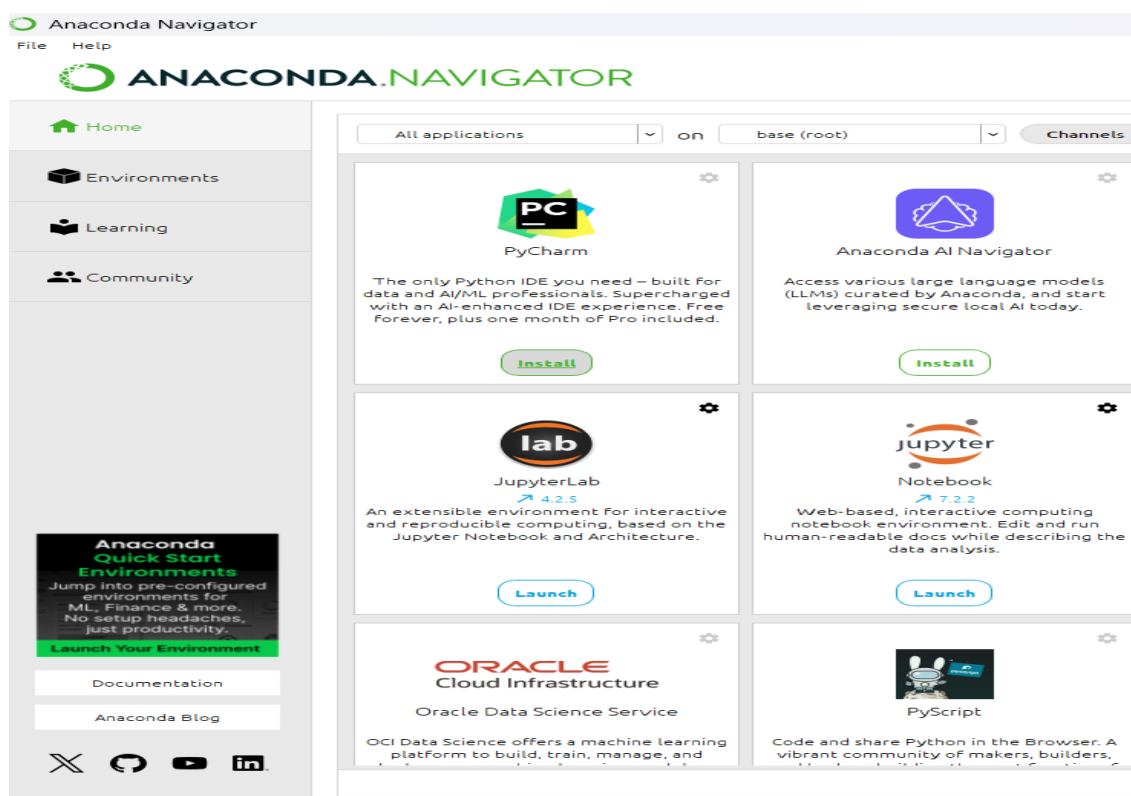


Figure 2. Anaconda Navigator

4.2 Launching Jupyter Notebook

1. From Anaconda Navigator, open **Jupyter Notebook**
2. Navigate to the folder where your .ipynb file is stored
3. Open the notebook (e.g. Research.ipynb)

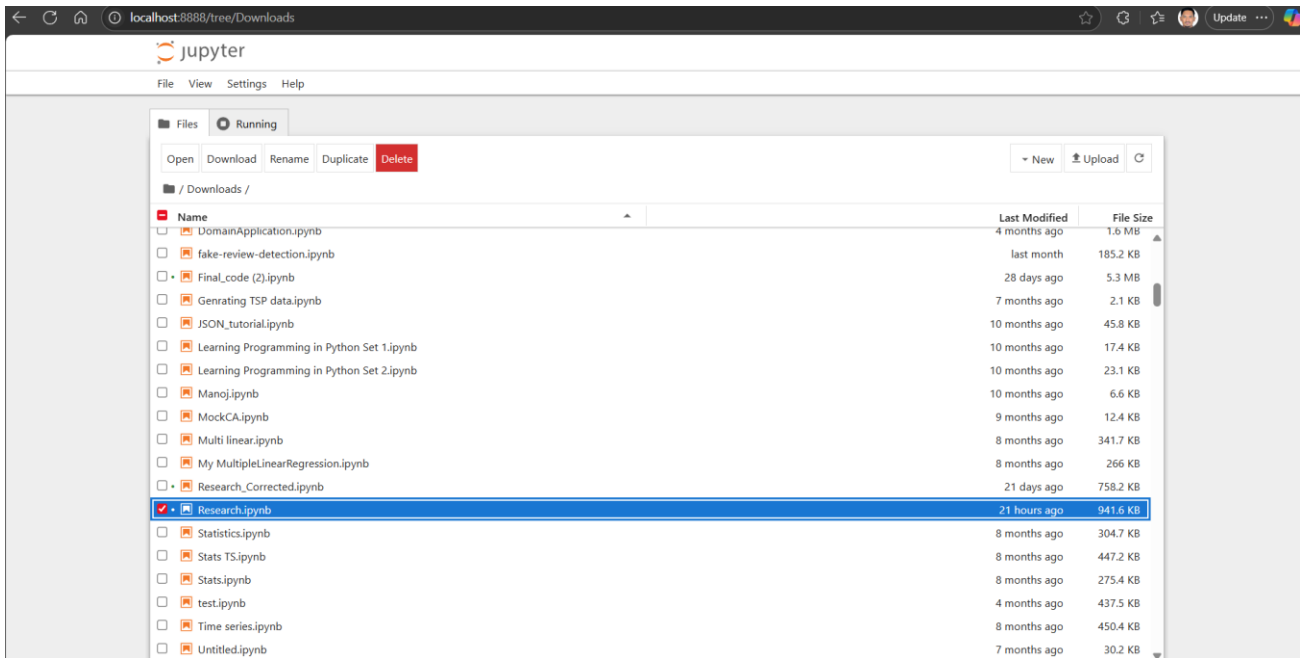


Figure 3. Jupyter Notebook File View

5. Open Notebook & Run

1. Launch Research.ipynb
2. Ensure the dataset file is loaded correctly:

```
# Load dataset from local path
data = pd.read_csv("C:/Users/manoj/Downloads/Research practicum/fake reviews dataset.csv/fake reviews dataset.csv")
```

Figure 4: Reading Dataset

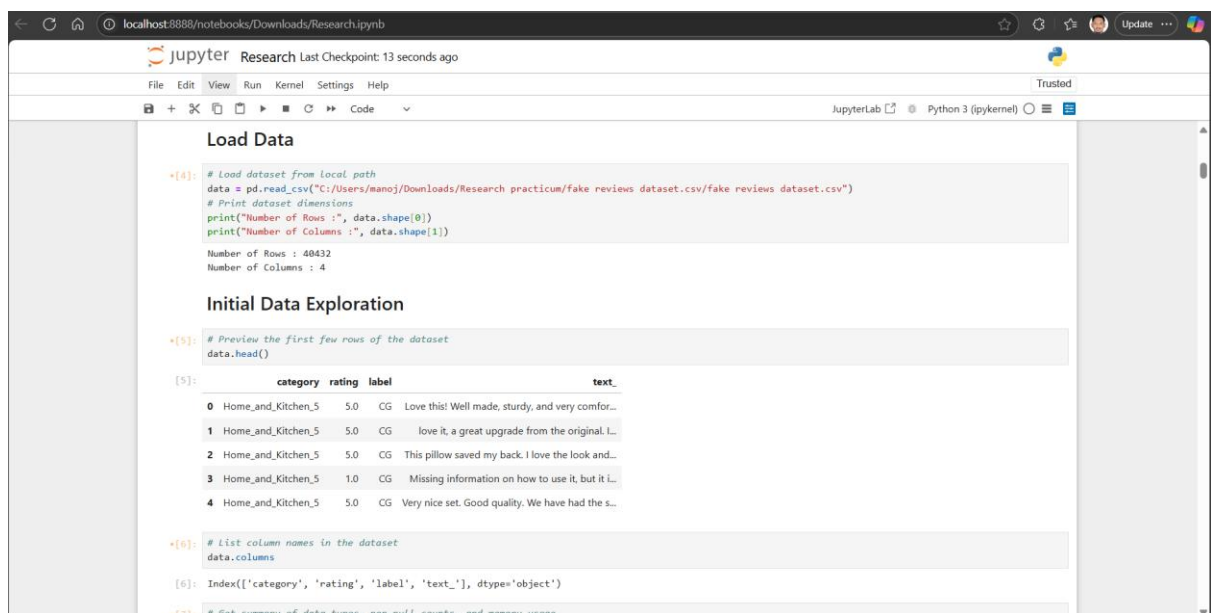


Figure 5. Research.ipynb File

5.1 Run all cells:

Run each cell in sequence using **Kernel** → **Restart & Run All**

6. References

Kaggle. (2022). *Fake Reviews Dataset*. Available at: <https://www.kaggle.com/datasets/mexwell/fake-reviews-dataset> (Accessed: 7 August 2025).

Anaconda Inc. (2023). *Anaconda Distribution*. Available at: <https://www.anaconda.com/> (Accessed: 7 August 2025).

Project Jupyter. (2023). *Jupyter Notebook*. Available at: <https://jupyter.org/> (Accessed: 7 August 2025).