# Configuration Manual

MSc Research Project
MSc AI

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## 1 Software Used

Python 3.9 is the programming language used in this research. The development environment used is Jupyter Notebook 7.0.8 with Anaconda Navigator 2.6.2. The Python software libraries used are pandas 2.1.4, numpy 1.26.4, matplotlib 3.8.4, scikit-learn 1.5.1, seaborn 0.13.2, and lime 0.2.0.1.

The Python program is called: lime-ml-traffic-data.ipynb

The computer used is a Dell laptop with 16 GB ram, with an Intel i7 cpu, running 64-bit Microsoft Windows 10.

## 2 The Dataset

The dataset contains traffic accident data for the state of Victoria in Australia. The dataset has 152,445 records and 15 features, and is 22.9 Mbyte in size. The name of the dataset, on the Kaggle website is "Victoria Road Crash Data (2012-2023)", and the data file is a CSV file called Vic_Road_Crash_Data.csv. The dataset was sourced from Kaggle as described in Kaggle (2024). The dataset file was renamed to vic_traffic_accident_data.csv for the Python code.

## References

Kaggle (2024). Victoria road crash data (2012-2023). `https://www.kaggle.com/datasets/jaspreetkhokhar/victoria-road-crash-data-2012-2023`, Last accessed on 2024-08-11.