|  |  |  |
| --- | --- | --- |
| Personal Computer | | |
| Hardware | RAM | 16 GB |
| CPU | Processor 12th Gen Intel(R) Core(TM) i5-12400F |
| GPU | NVIDIA GeForce RTX 3060 |
| Software | OS | Microsoft Windows 11 Pro (Version 10.0.22621 Build 22621) |
| APPS | Visual Studio Code 1.87.2 |
| Python | Python 3.9 |
| Library | Pandas 2.1.1  TensorFlow 2.10.0  NumPy 1.24.3  Matplotlib 3.8.0  Scikit-learn 1.3.1  Scikit-multilearn 0.2.0  SHAP 0.44.0  Optuna 3.4.0 |