Mechanisms of Action (MoA) Prediction Tutorial - Group 4

Software Installation and Data Download Guide

Introduction

This tutorial will guide you through the installation of necessary software and downloading of datasets required for the MoA Prediction Tutorial. The goal is to ensure a seamless setup before starting the tutorial.

Software Requirements

1. Python and Required Libraries

Step 1: Install Python (recommended version: 3.8+)

- Download and install Python from Python.org.
- Ensure `pip` (Python package manager) is installed by running:
  python --version
  pip --version

Step 2: Install required Python packages Run the following command in your terminal to install necessary libraries:

- pip install numpy pandas scikit-learn matplotlib seaborn

2. Jupyter Notebook Installation

Jupyter Notebook is required to run and execute the tutorial code interactively.

Step 1: Install Jupyter Notebook

- pip install jupyterlab

Step 2: Launch Jupyter Notebook

- jupyter notebook

Data Download

MoA Dataset from GitHub

The dataset used in this tutorial is available in the GitHub repository:
https://github.com/Amber1234568/Mechanisms-of-Action-MoA-Prediction-Tutorial

Step 1: Clone the repository to access the dataset

- git clone https://github.com/Amber1234568/Mechanisms-of-Action-MoA-Prediction-Tutorial.git

Step 2: Navigate to the dataset directory

- cd Mechanisms-of-Action-MoA-Prediction-Tutorial

Expected Outcomes

- Python and necessary libraries installed.
- Jupyter Notebook running without issues.
- MoA dataset successfully downloaded and available in `./Mechanisms-of-Action-MoA-Prediction-Tutorial`.

Troubleshooting

- If `pip install` fails, try updating pip first:
  python -m pip install --upgrade pip
- If Jupyter Notebook does not open, try:
  jupyter notebook --allow-root

References

- GitHub Repository: https://github.com/Amber1234568/Mechanisms-of-Action-MoA-Prediction-Tutorial
- Jupyter Notebook: https://jupyter.org
- Scikit-learn: https://scikit-learn.org