**HAPP-Assignment 1: On-Line Signature Data Handling**

1. **Language and Compilation**

The program is written in Python and compiled into a standalone .exe using PyInstaller.

To compile the script into .exe, run:

pyinstaller –onefile DPmatching.py

Make sure the required packages are installed:

pip install matplotlib

1. **How to Use**

* Ensure SignatureSampleData/ is present in the current directory.
* Run DPmatching.exe in the terminal (recommended), or manually run DPmatching.py script from an IDE like PyCharm.
* Both signature shape and variables graph will be shown on the screen and saved to result folder
* Optional setting: Toggle the display of images by editing the show\_plot=True argument in the script.

1. **Result Details**

* The program processes two .sdt signature files.
* It will generate:
  + 2 signature shape images
  + 2 variables graphs (with 5 variables split into separate plots)
* All result images will be saved into a new folder (if not exists) named result/ in the current working directory.

1. **Result Capture**

* Screenshots showing the program execution can be found in the program\_screenshot/ folder.