

User Guide

Spectrum Analyzer Tool



Team 3

Fall 2023

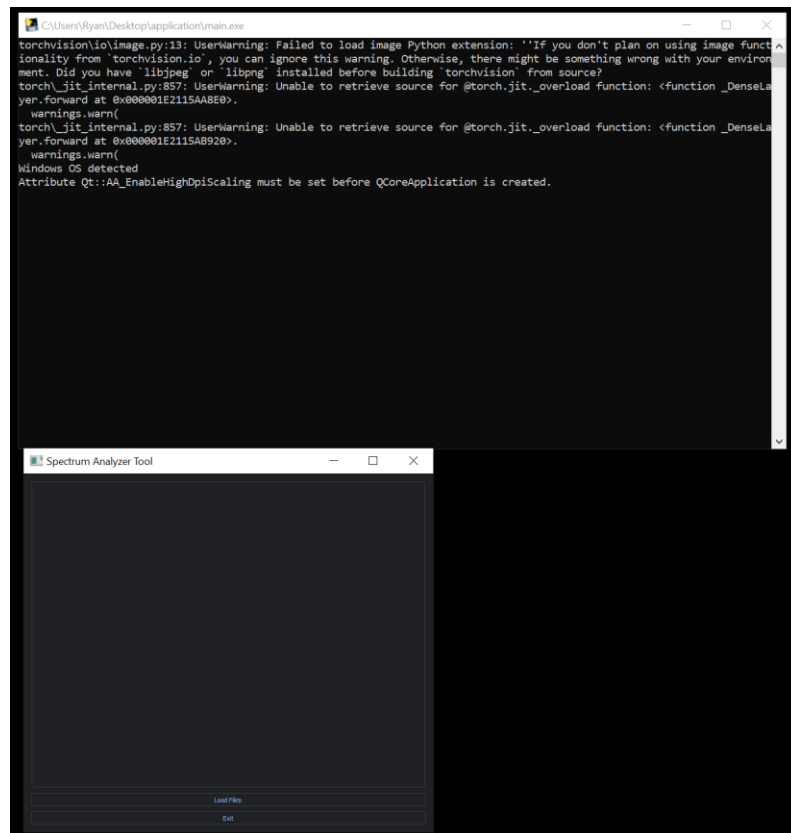
0. Quick developer setup:
 - a. Install IDE of your choice; we used PyCharm with Python interpreter version 3.11.
 - b. Open the main.py file and download the dependencies listed at the top of the file.
 - c. Run the program.

1. End-User Guide:

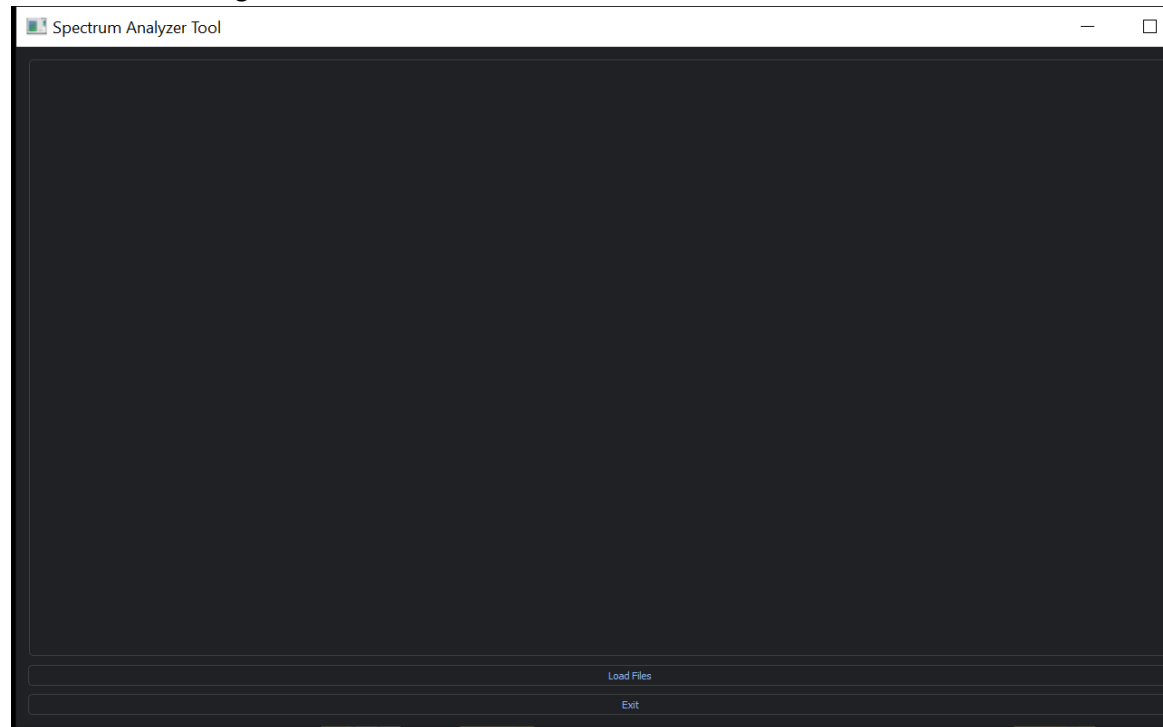
- a. Unzip the file folder; the unzipped folder is approximately 1.31 GB.
 - i. View when unzipped

	_internal	11/25/2023 1:15 AM	File folder	
	main.exe	11/15/2023 1:37 PM	Application	29,3

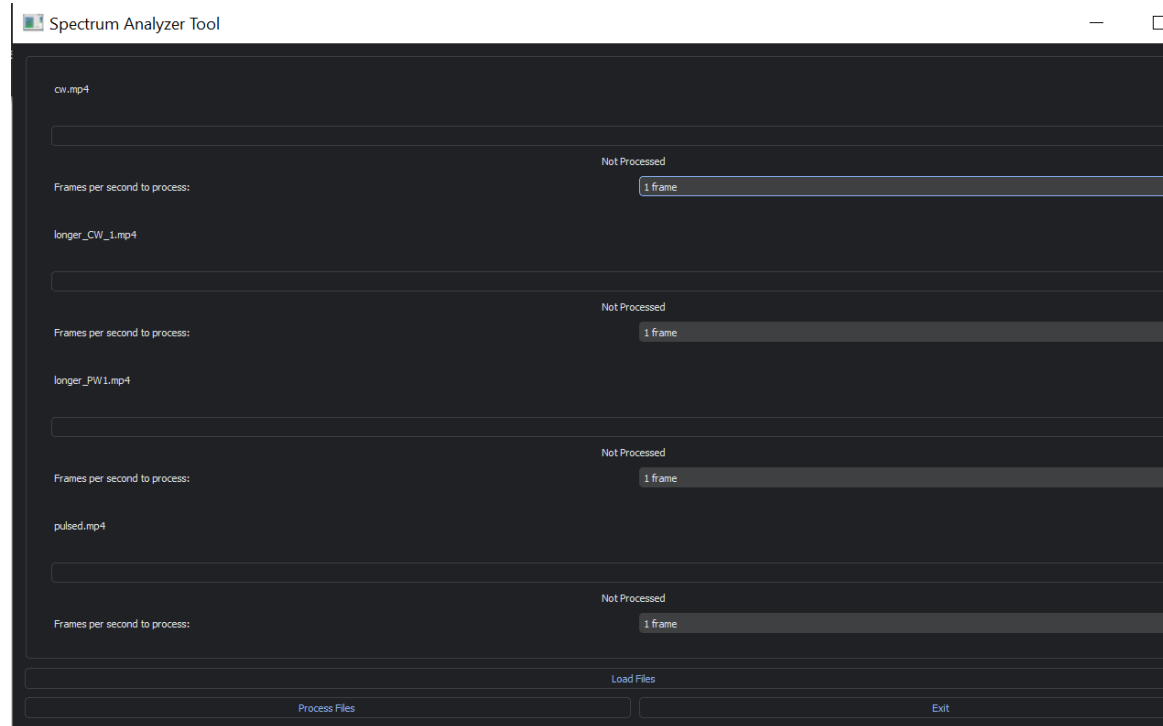
- b. Click on the main.exe file to launch the application.
 - i. View when launched; two windows appear; one window shows system messages, and the other window shows the UI for the application.



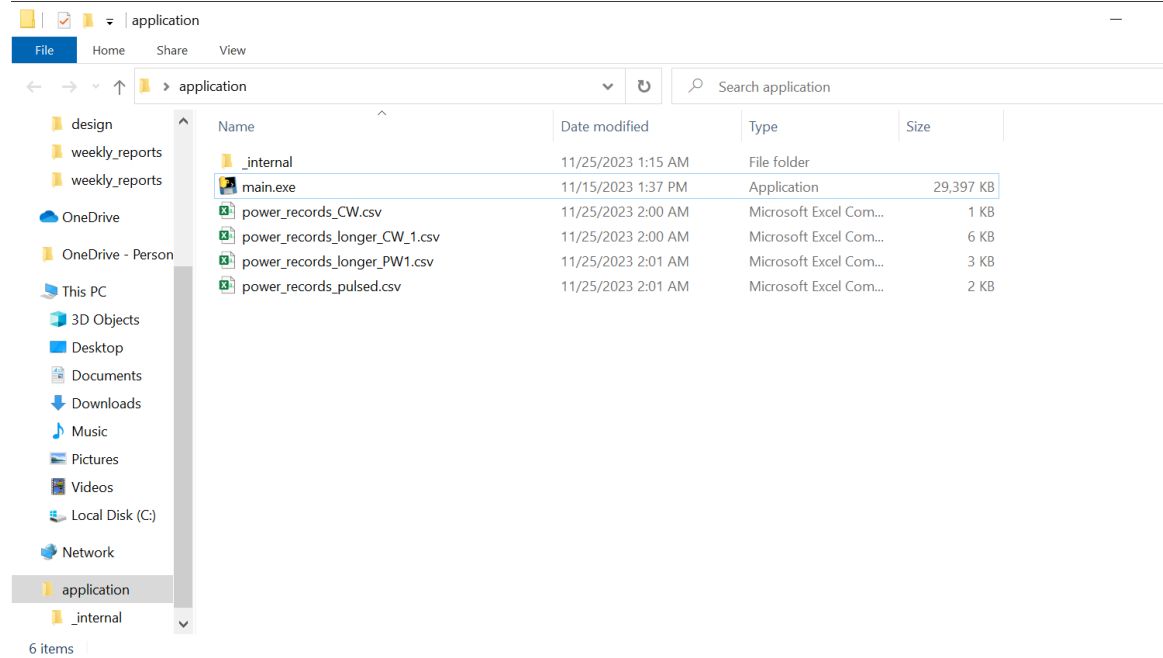
- c. Click “Load files”. A file explorer window will appear where you can select multiple videos.
- i. View before loading files.



- ii. View after loading files.



- d. Select the number of frames to skip and click “process files”.
- i. View after clicking process files. The CSV files will be processed and stored in the same folder as the application.



ii. View of one of the CSV files opened in Excel.

	A	B	C	D	E	F	G	H
1	timestamp	frequency	power	min_power	max_power	avg_power		
2	0:01	1.03	-53.16	-53.16	-53.16	-53.16		
3	0:01	1.03	-53.94	-53.94	-53.16	-53.55		
4	0:01	1.01	-33.18	-53.94	-33.18	-46.76		
5	0:01	1.01	-32.98	-53.94	-32.98	-43.31		
6	0:01	1	-32.01	-53.94	-32.01	-41.05		
7	0:01	1	-32.88	-53.94	-32.01	-39.69		
8	0:01	1	-32.88	-53.94	-32.01	-38.72		
9	0:01	1	-33.08	-53.94	-32.01	-38.01		
10	0:02	1.01	-33.18	-53.94	-32.01	-37.47		
11	0:03	1	-32.88	-53.94	-32.01	-37.02		
12	0:04	1	-33.18	-53.94	-32.01	-36.67		
13	0:05	1	-33.18	-53.94	-32.01	-36.38		
14	0:06	1	-32.79	-53.94	-32.01	-36.1		
15	0:08	1	-33.27	-53.94	-32.01	-35.9		
16	0:09	1	-33.37	-53.94	-32.01	-35.73		
17	0:11	1	-33.37	-53.94	-32.01	-35.58		
18	0:12	1	-33.18	-53.94	-32.01	-35.44		
19	0:13	1	-32.79	-53.94	-32.01	-35.29		
20	0:14	1	-32.98	-53.94	-32.01	-35.17		
21	0:15	1	-33.18	-53.94	-32.01	-35.07		
22	0:16	1	-32.59	-53.94	-32.01	-34.95		
23	0:17	1	-32.59	-53.94	-32.01	-34.85		
24	0:18	1.03	-53.84	-53.94	-32.01	-35.67		
25	0:19	1.01	-53.45	-53.94	-32.01	-36.41		
26								
27								

e. To close the program you can close the system window, or the UI window, or simply press “exit” within the UI window.