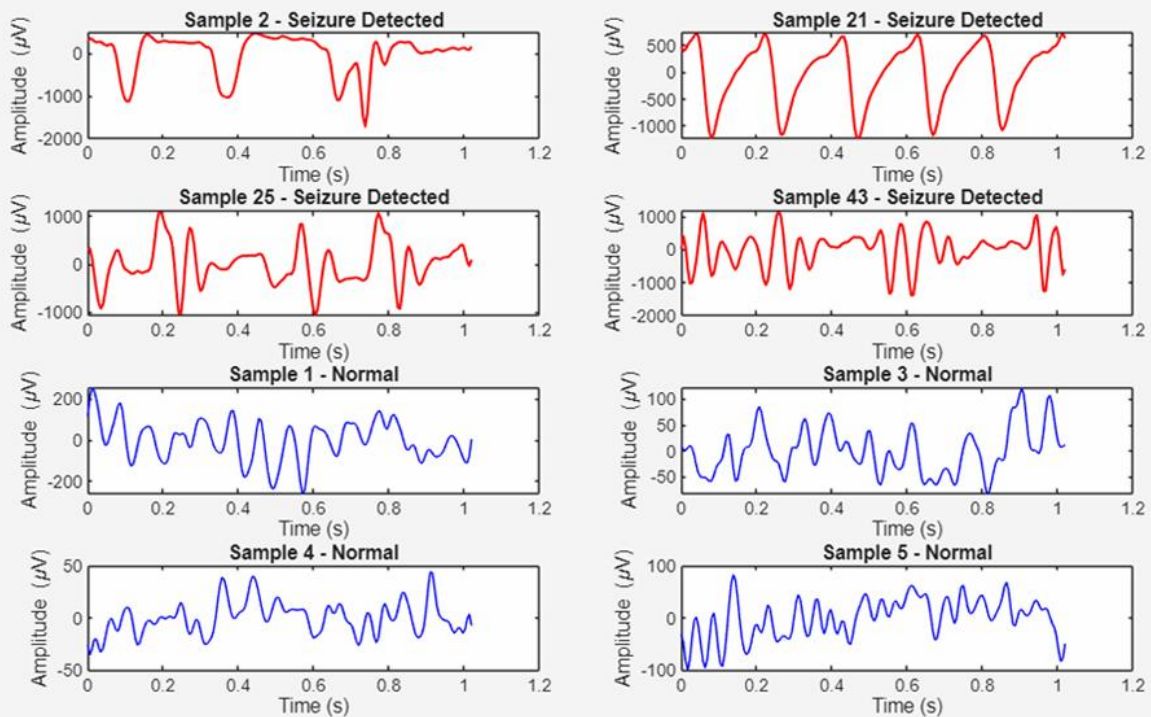
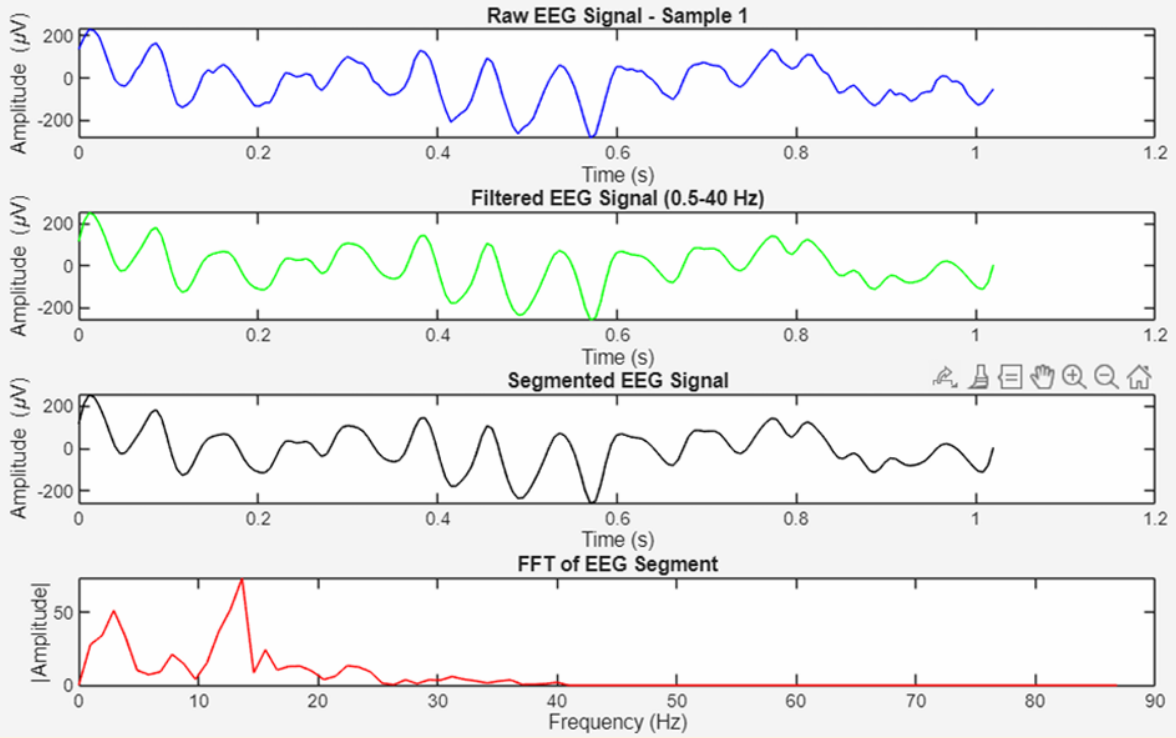


OUTPUTS



```
--- EEG Data Processing Started ---
Total samples: 11500
EEG points per sample: 178
Filtering all samples...
Filtering progress: 10%
Filtering progress: 20%
Filtering progress: 30%
Filtering progress: 40%
Filtering progress: 50%
Filtering progress: 60%
Filtering progress: 70%
Filtering progress: 80%
Filtering progress: 90%
Filtering progress: 100%
FFT-based bandpass filtering completed.
Signal segmentation completed (each row = one segment).
Extracting FFT features for all samples...
FFT features extracted successfully.
--- Sample Feature Values & Seizure Detection ---

Sample #2
  Mean Frequency: 10.78 Hz
  Peak Frequency: 2.93 Hz
  Band Power: 444949.4041
  Label (Original): 1
  !!! Seizure Detected !!!
  Reason: Band Power is higher (444949.40 vs 26451.30) and Peak Frequency is lower (2.93 Hz vs 4.72 Hz) than normal.
```

Sample #3

```
  Mean Frequency: 11.92 Hz
  Peak Frequency: 1.95 Hz
  Band Power: 3893.8148
  Label (Original): 5
  No Seizure Detected
```

Sample #4

```
  Mean Frequency: 13.69 Hz
  Peak Frequency: 10.73 Hz
  Band Power: 496.3074
  Label (Original): 5
  No Seizure Detected
```

Sample #5

```
  Mean Frequency: 14.33 Hz
  Peak Frequency: 0.98 Hz
  Band Power: 2963.4821
  Label (Original): 5
  No Seizure Detected
```

```
-----
All processing steps completed successfully!
Total samples processed: 11500
Feature file generated: EEG_FFT_Features_Seizure.csv
All plots displayed.
-----
```

Sample #21

Mean Frequency: 9.54 Hz

Peak Frequency: 4.88 Hz

Band Power: 623741.8783

Label (Original): 1

!!! Seizure Detected !!!

Reason: Band Power is higher (623741.88 vs 26451.30) and Peak Frequency is lower (4.88 Hz vs 4.72 Hz) than normal.

Sample #25

Mean Frequency: 13.30 Hz

Peak Frequency: 8.78 Hz

Band Power: 376048.5187

Label (Original): 1

!!! Seizure Detected !!!

Reason: Band Power is higher (376048.52 vs 26451.30) and Peak Frequency is lower (8.78 Hz vs 4.72 Hz) than normal.

Sample #43

Mean Frequency: 16.56 Hz

Peak Frequency: 14.63 Hz

Band Power: 561839.5283

Label (Original): 1

!!! Seizure Detected !!!

Reason: Band Power is higher (561839.53 vs 26451.30) and Peak Frequency is lower (14.63 Hz vs 4.72 Hz) than normal.

Sample #1

Mean Frequency: 12.20 Hz

Peak Frequency: 13.65 Hz

Band Power: 18204.0386

Label (Original): 4

No Seizure Detected