Epileptic Seizure Prediction

- We want to develop a early seizure warning prediction system for epileptic patients using a machine learning approach.
 - Identification of a preictal state can be used to notify patients of oncoming seizures so that they are better prepared.
- o iEEG data from epileptic dogs will be used as a model system, we will later expand this to humans.
 - Data is provided through kaggle.com by the International Epilepsy Electrophysiology Portal
 - iEEG data is available from 5 dogs (2.5GB 10GB) and 2 human patients (13GB 14GB)
 - Data segments are divided into interictal and preictal categories for training and tests
- We will use fast Fourier transform to preprocess the data and use a support vector machine algorithm to identify interictal and preictal states.

