Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation

EARLY DETECTION OF FOREST FIRE USING DEEP LEARNING

PRE - REQUISITES

Team ID	PNT2022TMID05778
Project Name	Classification of Arrhythmia by Using Deep LearningProject-Early detection of forest fire using deep learningwith 2-D ECG Spectral Image Representation

Pre-Requisites:

To complete this project you should have the following software and packages

Anaconda Navigator:

Anaconda Navigator is a free and open-source distribution of the Python and R programming languages for data science and machine learning related applications. It can be installed on Windows, Linux, and macOS.Conda is an open-source, cross-platform, package management system. Anaconda comes with so very nice tools like JupyterLab, Jupyter Notebook, QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code. For this project, we will be using Jupiter notebook and spyder

To build Deep learning models you must require the following packages

Tensor flow: TensorFlow is an end-to-end open-source platform for machine learning. It has a comprehensive, flexible ecosystem of tools, libraries, and community resources that lets researchers push the state-of-the-art in ML and developers can easily build and deploy ML-powered applications.

Keras: Keras leverages various optimization techniques to make high-level neural network API easier and more performant. It supports the following features:

- Consistent, simple, and extensible API.
- Minimal structure - easy to achieve the result without any frills.
- It supports multiple platforms and backends.
- It is a user-friendly framework that runs on both CPU and GPU.
- Highly scalability of computation.

open cv: OpenCV is a library of programming functions mainly aimed at real-time computer vision

- Type “pip install numpy” and click enter.
- Type “pip install pandas” and click enter.

- Type “pip install matplotlib” and click enter.
- Type “pip install scikit-learn” and click enter.
- Type "pip install tensorflow==1.14.0” and click enter.
- Type "pip install keras=2.2.4” and click enter.
- Type "pip install opencv-python” and click enter.
- Type “pip install Flask” and click enter.