

Team ID : PNT2022TMID48713

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

APPLICATIOTN DEVELOPMENT/APPLICATION DEVELOPMENT.py

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Import os

Import numpy as np

From flask import Flask,request,render_template

From keras.models import load_model

From keras.utils import load_img

From keras.utils import img_to_array

App=Flask(__name__)

Model=load_model('ECG.h5')

@app.route("/")

Def about():

 Return render_template("about.html")

@app.route("/about")

Def home():

 Return render_template("about.html")

@app.route("/info")

Def information():

 Return render_template("info.html")

@app.route("/upload")

Def test():

 Return render_template("index6.html")

@app.route("/predict", methods=["GET","POST"])

Def upload():

 If request.method=="POST":

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F=request.files['file']

Basepath=os.path.dirname('__file__')

Filepath=os.path.join(basepath,"uploads",f.filename)

f.save(filepath)

img=load_img(filepath,target_size=(64,64))

x=img_to_array(img)

x=np.expand_dims(x,axis=0)

pred=model.predict_classes(x)

print("prediction",pred)

index=['Left Bundle Branch Block','Normal','Premature Atrial Contraction','Premature Ventricular Contraction','Right Bundle Branch Block','Ventricular Fibrillation']

result=str(index[pred[0]])

return result

return None

port=int(os.getenv("PORT"))

if __name__=="__main__":

    app.run(debug=False)
```