**DESCRIPTION**

Our project objective is to detect osteoporosis at an early stage through gait analysis. We are using convolutional neural networks and multilayer recurrent cells (LSTM or GRU) to extract pose descriptor from the video frames. Using this pose descriptor we will make people identification vector and these identification vector will classify whether the person has osteoporosis or not.

**CONTENTS OF DIRECTORY**

* Augumentation.py to increase the dataset.
* Human\_pose\_nn.py is a file which take rgb video frames and produces 2d vector (gait descriptor)
* Gait\_nn.py it uses lstm and gru to make 1d pose descriptor
* Video\_frames.py it changes video into frames
* L.py produces identification vector
* Other are helper files

**HOST PROJECT**

Package requirements: Tenserflow1.11, Numpy 1.15.3 , Scipy 1.1.0

Main file is L.py which the user has to run

\*\* You will require our team to run the code