

plot_walking_all_correspondents

January 12, 2021

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[25]: from helpers import pandas_helper, math_helper
      from datetime import datetime
      import matplotlib.pyplot as plt

      def plot_activity(df, correspondent, activity):
          df = df[df['pal_activity_name'] == activity]

          if df.empty:
              return

          df_resampled = df.resample("100ms").mean()
          df_resampled['pal_mag_acc'] = df_resampled.apply(lambda row: math_helper.
          ↪convert_to_acceleration(row), axis=1)
          df_resampled.index = df_resampled.index - df_resampled.index[0]

          #print(df_resampled.index.loc[])
          df2 = df_resampled['pal_mag_acc'][:100]

          plt.title('4 correspondents: ' + activity)
          plt.ylabel('Magnitude of acceleration(x,y,z)')

          #plt.plot(df_resampled.index, df_resampled['pal_mag_acc'],
          ↪label=correspondents[i])
          plt.plot(df2.index, df2, label=correspondents[i])
          plt.legend(loc='best')

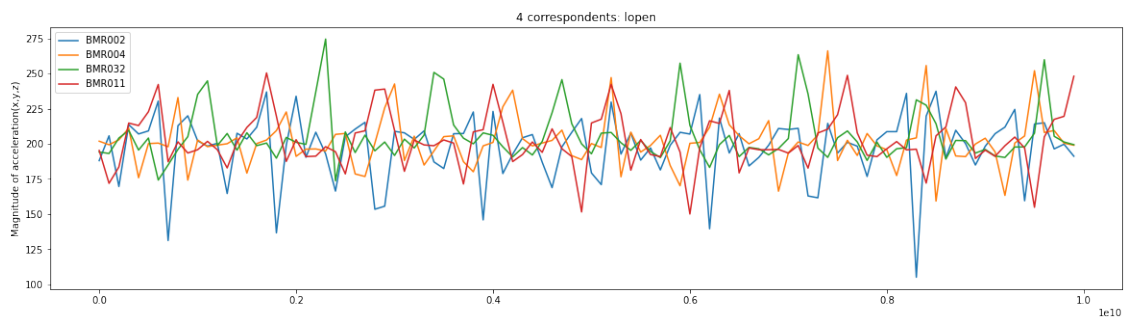
      correspondents = ['BMR002', 'BMR004', 'BMR032', 'BMR011']

      plt.figure(figsize=(20,5))

      for i in range(len(correspondents)):
          df = pandas_helper.read_csv_activpal20_with_activiteiten(correspondents[i])

          plot_activity(df, correspondents[i], 'lopen')
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plt.show()
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