

GAG 2019

OU-ISIR Wearable Sensor-based Gait Challenge:

Age and Gender



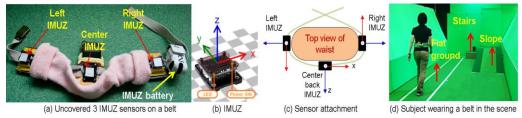
Call for Participants

http://www.am.sanken.osaka-u.ac.jp/GAG2019/

Recently, wearable computing resource, such as smartphone, is developing so quickly. People are using smartphone for communication, entertainment, business, travelling, and browsing information. Although it has a huge benefit if we can use such wearable computing resource to support people life, the healthcare application is very limited. We would like to break the limitation and boost up the research to support human health. One of the important step for a healthcare system is to understand age and gender of the user who is wearing the sensor through gait. Gait is chosen since it is the most dominant daily activity, which is considered to contain not only identity but also physical, medical conditions.

Winners will achieve certificates and award prize (we are exploring for fund).

Registration The competition registration can be done by <u>Google Form</u> or email. If you would like to register by email, please send to <u>wearableSensorChallenge@gmail.com</u> with subject line as **OU-ISIR-GAG**, with the following information: (1) team name; (2) names, affiliations of all members; and (3) name, affiliation, email, phone number and mailing address of contact person. A *reference number* will be assigned to each team by our confirmation email.



Important dates (GMT):

Test dataset release: 15th Dec 2018 Registration by: 15th Dec 2018 Prediction result by: 1st Feb 2019 Results announce by: 2nd Feb 2019

Organizers:

Dr. Trung Thanh Ngo Prof. Md Atiqur Rahman Ahad Assoc. Prof. Daigo Muramatsu Assoc. Prof. Yasushi Makihara Prof. Yasushi Yagi Assoc. Prof. Sozo Inoue Tahera Hossain Anindya Das Dept. of EEE, University of Dhaka Masud Ahmed Dept. of EEE, University of Dhaka Yuichi Hattori Kyushu Institute of Technology

Datasets: The training datasets are publicly available, while test dataset will be uploaded. All these datasets were captured by the same sensors (IMUZ).

Training datasets: Participants can use both OU-ISIR inertial datasets:

- a) The OU-ISIR Gait Database, Inertial Sensor Dataset: <u>http://www.am.sanken.osaka-u.ac.jp/BiometricDB/InertialGait.html</u>
 b) The OULISIR Gait Database, Inertial Sensor Dataset:
- b) The OU-ISIR Gait Database, Similar Action Inertial Dataset: http://www.am.sanken.osaka-u.ac.jp/BiometricDB/SimilarActionsInertialDB.html

Test dataset: A half of the dataset is similar to that of a) and b). The other half was captured in the wild on an almost flat ground; sensors were fixed in a backpack while their orientations will be unavailable. File format will be the same as that of a).

Prediction results submission: Participants have to submit prediction results (age and gender) for all available data files of the test dataset by sending the attached prediction file to wearableSensorChallenge@gmail.com with the assigned *reference number* on the subject line.

Evaluation: We will evaluate the results separately for age and gender. The results will be evaluated by mean absolute error for age and number of mistake for gender.