

CLAIMS

1. A user location calculation apparatus comprising:

an offline friend determination means configured to calculate an offline
5 friend level on the basis of first information obtained from at least one social media
account related to a target user having an account in social media, the offline friend
level indicating a degree of friendship in real space between the target user and the
at least one social media account related to the target user;

a weight calculation means configured to calculate a weight to be assigned
10 to the first information on the basis of the offline friend level; and

a candidate location score calculation means configured to calculate a score
representing possibility of the target user being active at a candidate location on
the basis of the first information and the weight.

15 2. The user location calculation apparatus according to Claim 1, wherein
the weight calculation means sets a value of the weight larger as the offline
friend level increases, and

the candidate location score calculation means increases impact of the first
information on calculation of the score as a value of the weight increases.

20 3. The user location calculation apparatus according to Claim 1 or 2,
wherein the offline friend determination means determines whether the social media
account related to the target user is a local account related to a specific area, and
calculates the offline friend level on the basis of a result of the determination.

25 4. The user location calculation apparatus according to Claim 3, wherein
when the offline friend determination means determines that it is unclear whether
the social media account related to the target user is the local account, the offline
friend determination means determines whether a social media account related to
30 the social media account related to the target user is the local account on the basis
of second information obtained from the social media account related to the social
media account related to the target user, and determines whether the social media
account related to the target user is the local account by using a result of the

determination.

5 5. The user location calculation apparatus according to Claim 4, wherein the offline friend determination means determines that the social media account related to the target user is the local account on the basis of spatial dispersion of areas related to social media accounts related to the social media account determined to be the local account related to the target user.

10 6. The user location calculation apparatus according to any one of Claims 1 to 2, wherein the offline friend determination means calculates the offline friend level on the basis of an activity range of the social media account related to the target user.

15 7. The user location calculation apparatus according to any one of Claims 1 to 6, wherein
 the offline friend determination means further calculates a reliability level of the offline friend level, and
 the weight calculation means calculates the weight on the basis of the offline friend level and the reliability level.

20 8. The user location calculation apparatus according to any one of Claims 1 to 7, further comprising:
 an active user determination means configured to determine whether a social media account related to the target user is an account of an active user,
 wherein the offline friend determination means calculates the offline friend level of a social media account related to the target user determined to be an account of an active user by the active user determination means.

30 9. A user location calculation method comprising:
 calculating an offline friend level on the basis of information obtained from at least one social media account related to a target user having an account in social media, the offline friend level indicating a degree of friendship in real space between the target user and the at least one social media account;
 calculating a weight to be assigned to the information by using the offline

friend level; and

calculating a score representing possibility of the target user being active at a candidate location on the basis of the information and the weight.

5 10. A computer-readable medium storing a program causing a computer to perform a process comprising:

calculating an offline friend level on the basis of information obtained from at least one social media account related to a target user having an account in social media, the offline friend level indicating a degree of friendship in real space
10 between the target user and the at least one social media account;

calculating a weight to be assigned to the information by using the offline friend level; and

calculating a score representing possibility of the target user being active at a candidate location on the basis of the information and the weight.