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Busyness Forecast Method at Near Future that Uses Behavior.

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The ubiquitous network can develop by the spread of a cellular phone and a smart phone, and communications that do not ask time and the place be generated in recent years. However, the advantage that it can contact the other party anywhere at what time becomes in the cellular phone and the generation of communications according to the inappropriate timing becomes a problem from no understanding of other party's situation while it is. Then, the research to understand other party's situation and state is actively done. However, there is a possibility that communications in the inappropriate timing are generated only by guessing a present situation and the state like an existing research when there is an important event after a few minutes.

Then, it has aimed at the decrease of the communications generation according to improper timing that happens because it understands only an individual present situation and the state by guessing busy at the near futurity from the individual action history obtained from two or more sensor information in the present study.

The forecast of busy at the near futurity is calculated stochastically in the busy forecast technique at the near futurity in the present study. The reason calculated stochastically is that the future is not determinately predictable even if tons of information are collected by the concept of the reason of the action and the Laplace of not doing the action the same as

the rule that the user provided by himself/herself. It studies by acquiring necessary sensor information from various sensors that the being referred person is carrying in the proposal technique every minute, and using the acquired data until the day before. And, it is said that it will want you to forecast busy at the near futurity of the person who is referred from those who refer. Busy at the near futurity of the person who is referred using the studied data when there is a demand is forecast. When targeting by the proposal technique it is time when is moving by the being referred person, and is conferring and doesn't have movement while teaching it, it is off the subject. Moreover, the proposal technique's operating assumes time when the being referred person exists in the room.

The parameter to which the accuracy of busy at the near futurity that the proposal technique forecast improved most was verified by what analyzing the pattern one in this verification experiment. It verified it by doing the support simulation of the proposal technique by using acquired data by the data collection of the questionnaire form. Then, the action histories are collected by the questionnaire method, and information obtained from the sensor and the teacher data of busy at the near futurity have been extracted in the present study. It is because the situation and the state thought to be a personally related to busy at the near futurity can surely be acquired as the reason. When the questionnaire was filled in, the answer experimenter input it to the questionnaire input form by oral by hand power so that the questionnaire might decrease the testee's load. However, it input it to the questionnaire input form for the testee at that time because the experimenter was not in the laboratory. And, effectiveness was verified by "support simulation based on result of the questionnaire" Analyze it "data as soon as" it.

It has been understood to be able to forecast busy at the near futurity in high accuracy when the accuracy rate of the proposal technique is verified. The reason why the accuracy rate is high returns an initial value from few not predictable of busy at the near futurity of the number of data in the proposal technique immediately after support begins. I have understood the thing that the forecast of high accuracy becomes possible immediately after beginning of support from assuming an initial value to be not busy because it understood ratios not busy (Arriving is received) are higher than

the analyses of the collected data. Next, it has been understood that it is divided into group "It is a group that does an action " average" that does the action in which the feature exists in each " individual to be referred when the support method is verified, and the accuracy rate of the proposal technique improves by the thing that each group switches the study data. Moreover, when the grouping method was verified, group "If it was less than threshold, it is group that did an action " average" that did the action in which the feature existed in each " individual was verified if busy was more than the threshold the individual being calculated.

Finally, the summary is described. In the present study, busy at the near futurity of the person who was referred using the action history of the being referred person who obtained it from various sensors was forecast. And, the verification of the effectiveness of the proposal technique and the analysis were done by doing the support simulation of various patterns. The thing that busy at the near futurity can be forecast in high accuracy by giving an appropriate initial value from the result of the analysis in the proposal technique immediately after beginning of support has been understood. In addition, it is grouped to use and to be referred, each group switches the study data, and the thing that the accuracy rate of the proposal technique improves has understood the threshold. It comes to be able to decrease the generation of communications according to improper timing more than the above-mentioned result.

Future tasks are to investigate a definition of time of the near futurity according to the feature of the organization and the group, initial values, and thresholds by collecting data in various organizations and groups, and extracting the feature of the organization and each group that collects.