ABSTRACT

Master dissertation: 111 pp., 36 fig., 1 app., 28 sources.

The relevance. It is likely that every day we pass by strangers who may become our best friends, business partners or even a mate. What if we could identify those people around us whom we do not know, but probably should - based on their digital profile? Whether you meet next time, grows in career or play tennis every week - never learn that opportunistic meeting could be the most valuable ever made. Different social resources such as Facebook and Foursquare, experimenting with data on the location of users, but so far the technology used for social search, failed to provide a seamless connection in close proximity and in a way that causes the most frustration users. This existing space can be overcome through technology "point to point", which unlike beacons does not require additional hardware, operating both inside and outside, and not energy efficient connecting devices directly from satellites, such as GPS.

Through the application, each person with a smartphone can establish new social relations with the common people on the spot and at certain times. Neighborhood transform our technology in smartphones, portable beacons and allow us to find users based on where we are. Thus, we could hire or get a job or go on to find the perfect football game, just crossing paths one another. Over the past few decades, we are faced with a sharp shift in the way people interact. The problem is people communication over long distances was overcome by mail, telecommunications and eventually the Internet. Neighborhood technology would solve another problem - to connect nearby users in real time and on the road. This new concept of social networks can merge all our physical and digital environment and to ensure the widespread implementation of social acquaintances.

The conjucion with academic programs, plans, themes. Master's thesis

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Various social apps like Facebook and Foursquare have been experimenting with users' location data to connect relevant people nearby. But so far, the technologies used for social discoveries were not able to offer seamless connectivity, both in close vicinity and on the go, resulting in an unsatisfying user experience. This existing 'gap' could be overcome with peer to peer proximity technology, which, unlike beacons, does not require any hardware, works both in- and outdoors, doesn't drain the battery and connects devices directly peer to peer without relying on satellite signals like GPS.

With peer-tp-peer proximity integrated in an app, every person carrying a smartphone could establish new social interactions with people at a shared time and place. Proximity would turn our smartphones into portable beacons and enable us to discover users, no matter if indoors or out in the field. This way we would be able to hire and get hired on-the-go or find a perfect tinder match while simply crossing each other's paths.

Purpose and objectives of the study. The purpose of research - to reduce the time required for the identification of individuals in groups of people through the introduction of applications for personal mobile devices.

To achieve this goal it is necessary to solve the following tasks:

- analyze the known results of the neighborhood problem solution;
- review the known results of identification;
- read the proximity marketing;

 to develop knoware of the problem;

 master the features of mobile application development;

 master the services that enable the creation of a peering network;

 perform an analysis of the results obtained and the feasibility of development;

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 introduce the developed algorithms in the form of a software product;

 to conduct research on the effectiveness of the algorithms by computing experiment and to draw the conclusions.

The object of study is the process of identifying the listeners.

The subject of the research is the task of introducing proximity technology to detect nearby devices.

The research methods used in the work are based on methods of data mining.

Scientific novelty of the results is to formulate and implement a new approach to solving the problem of proximity by using a peer-to-peer network.

Publications. Work results are published in conference abstacts of Conference «IComputer Science, IOT-2017» and V All-Ukrainian scientific-practical conference "Modern trends of development of science".

IDENTIFICATION OF LISTENERS, TARGET AUDIENCE, MOBILE APP, E-REGISTRATION, PEER-TO-PEER NETWORK, PEER-TO-PEER, P2P, PROXIMATION, NEIGHBORHOOD