

ABSTRACT

This diploma project dedicated to the development of software and hardware systems for locating subscribers of cellular communication. Such systems are used by mobile operators, polices, rescue services, services of special purpose and military units.

The aim of this project is to develop algorithms for detection and location subscribers of cellular communication and implementation of software based on this algorithms.

Investigated the problem area attractions disclosure of subscribers of mobile networks, the survey of GSM specifications and detailed block diagram of cellular communication of standard GSM. The draft decisions are existing customers to identify the location of mobile networks and a review of the necessary mathematical tools to implement software modules. A comparative analysis of existing methods of solution of the problem and select the most appropriate.

The diploma project presents the results of testing of software modules disclosure location of the subscribers of cellular communication and recommendations for its further development and implementation.

The graduation work consists of 140 pages. It involves 3 appendices and 66 references comprising 31 items. There are 39 illustrations and 10 tables in the work.

Key words: deanonymization , Cell-ID, Data Mining, IMSI-Catcher, LAC, OpenBSC, SS7, OpenCellID.