عنوان مقاله:

MTProto Algorithm in Smart Home Remote Control UsingRobot Telegram

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خلاصه مقاله:

In a smart home automation system, all electrical systems,including electronic household appliances, are connected toeach other in a smart network. In this research, using aTelegram robot, the relative reduction of communicationdelays in the remote control of home appliances isdiscussed.The proposed method based on the MTProtoalgorithm works in the form of AES encryption, ۲۵۶-bitsymmetric, RSA encryption, ۲۰۴۸ and Diffie key exchangeprotocol. This protocol is designed for mobile applicationsthat connect to the server through an application interface.All messages shared in Telegram are encrypted "end-to-end"by this protocol. Sensors connected to home appliances arecontrolled by a Raspberry Pi board, and using the Internetconnection, it is possible to remotely control the homeintelligently from any location. Reducing communicationdelay is critical in timely control of appliances. In thisresearch, the reduction of communication delay in sendingmessages between the user and objects is ۳۰% less than theprevious basic methods.

كلمات كليدى:

smart home; remote control; telegram robot; MTProto algorithm;communication delay