**УДК 004**

## DISCRETE NOISY CHANNEL

*Jurayev  Suhrobjon  Salohiddino'g'li*

*Tashkent University of Information Technologies named  after Muhammad Al-KhorazmiyFaculty of "Computer Engineering"  Department of*

*"Information and Multimedia Technologies"*

*1$^{st}$ courseStudent of Masterdeegre*

*Shokirov  Shoxrux  Huseno'g'li*

*Karshi branch of the Tashkent University of  Information Technologies named after Muhammad Al-Khorazmiy 2$^{nd}$year  student*

*Shoniyozova  Yulduz  Qahramonqizi*

# DISCRETE NOISY CHANNEL

Автор: Jurayev S.S.,Shokirov S.H.,Shoniyozova Y.Q.
04.04.2021 19:36 -

*Karshi branch of the Tashkent University of  Information Technologies named after Muhammad Al-Khorazmiy3rd year  student*

**Annotation:** Consider now a situation in which a signal is exposed  to noise either during transmission or at one of the ends of the channel. This  means that the received signal does not necessarily match the one sent by the  transmitter. Two different classes of such situations can be distinguished. If  the same transmitted signal always results in the same signal at the receiver,  that is, if the received signal is an unambiguous function of the transmitted  signal, it can be said that there is signal distortion. If this function is  reversed, that is, each signal at the receiver is caused by only one signal at  the transmitter, this distortion can be taken into account, at least in  principle, by applying an appropriate correcting operation to the received signal.

**Keywords:** Channel error and bandwidth, Basic theorem for a noisy discrete  channel, Representation of a noisy discrete channel.

...

*Полный текст во вложении*