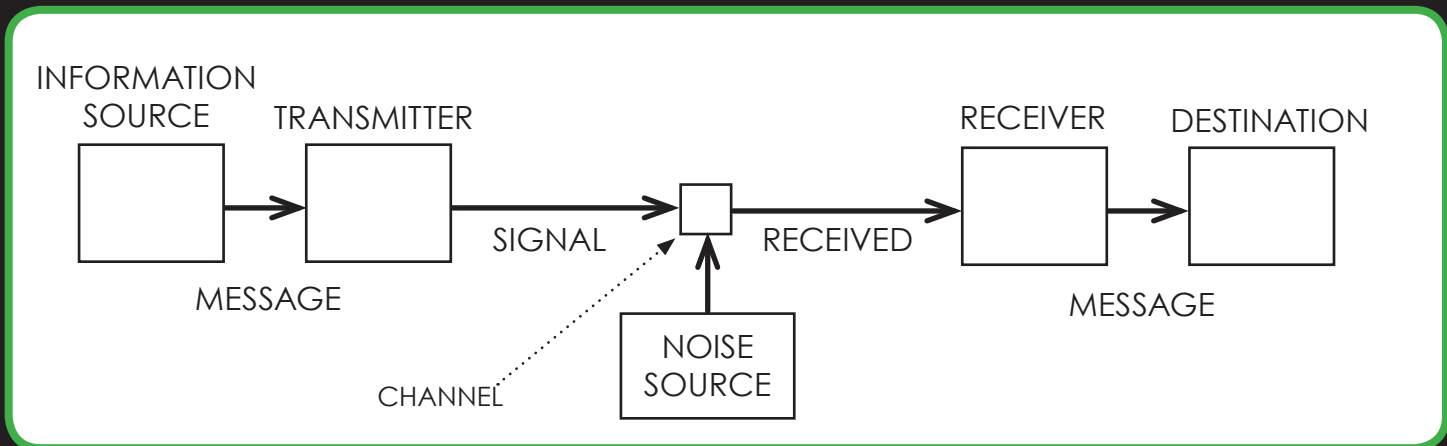
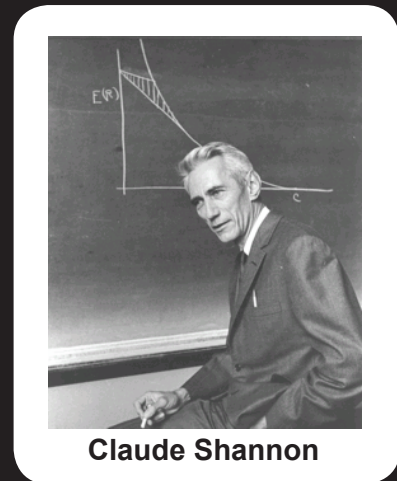


Mathematical Theory of Communication

Mathematical Theory of Communication (MTC):

Pioneered by Claude Shannon of Bell Laboratories in the late 1940's, MTC is the foundational theory behind data encoding and transmission. Without it we would not have cell phones, iPods, databases on hard drives, or the internet we know today. Shannon developed the concepts of redundancy, and information entropy. Ultimately, MTC deals with transmission between a sender and receiver of symbols encoded in well-formed strings of signals.



C.E.Shannon, "A mathematical theory of communication." Bell Syst. Tech. J., vol. 27, pp. 379-423, 623-656, July-Oct. 1948



Center for Science of Information
NSF Science & Technology Center

<http://soihub.org>



Our mission is to advance science and technology through a new quantitative understanding of the representation, communication and processing of information in biological, physical, social, and engineered systems.