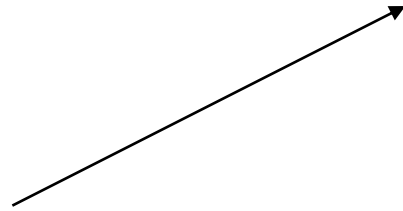


Communication Engineering-I

Topic 1: History of Communication

Communication

Telecommunication=Tele + Communication



Distance

So Telecommunication means “Communication at a distance”

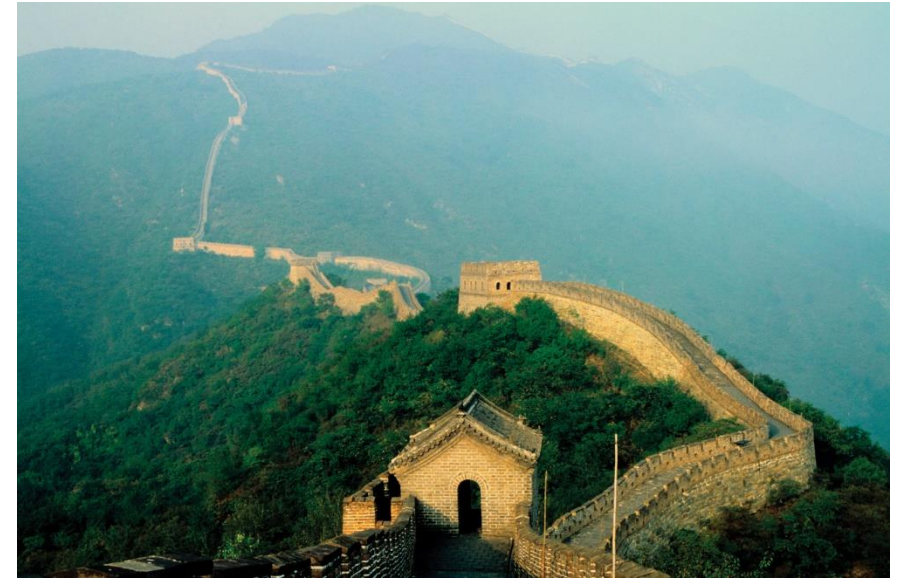
Ancient Communications



Harkara



Pigeons



Fire and Smoke

Telegraph (1836)

Invention Of Telegraph: First Wireless Communication



Telephone (1876)

Invention Of Telephone By Alexander Graham Bell: The Beginning of Electricity Based Analog Communication



FM Radio(1933)

Edwin Howard Armstrong



Edwin H. Armstrong
(1890-1954)

- Perhaps the **greatest** EE in history.
- Inventor of the:
 - feedback **amplifier**
 - electronic **oscillator**
 - super-hetrodyne **receiver**
 - **FM** radio.
- These inventions allowed for the transmission of **voice and music**.
- His ideas are still **widely used** today!

Modem (1958-1962)

MODEM=Modulator + Demodulator



This is a photo from Bell Labs

Mobile Phones (1983)

Mobile phone was first available commercially in 1983. This indicated the beginning of the large commercialization of communication systems.



Contribution of Electronics in Communication Devices

Evolution of the Mobile Phone



Motorola
8900X-2



Nokia
2146



Nokia
3210



Nokia
6210



Ericsson
T39



Alcatel
OT511



Samsung
E250



Apple
iPhone



BlackBerry
Curve 8900



Samsung
Galaxy S2



Samsung
Galaxy S4



Sony Xperia
Z Ultra