




Summary of Lecture-2

* Orbits: A path in which satellites rotate taking a certain point as centre.

* Depending on the altitude from earth's surface satellites are 3 types!

- 1) GEO: Geosynchronous earth orbit satellite (15000 km to 35786 km)
- 2) MEO: Medium earth orbit satellite (5000 km to 15000 km)
- 3) LEO: low earth orbit satellites (1500 km)

* Orbits are 3 types

- 1) Equatorial orbit satellite 
- 2) Inclined orbit satellite 
- 3) Polar orbit satellite 

* upper and lower Van Allen belt where there are particles that may be charged that can destroy satellites so in these space we don't put satellite.
(15000 km to 35786 km) (1500 km to 5000 km)

* Satellites in geosynchronous orbits needs line of sight propagation and satellites are positioned 120° from each other.

* Triangulation : our position \rightarrow  part of GEO

* GPS part of GEO

* LEO satellite system 1) UML: User Mobile location:
user \leftrightarrow satellite. 2) GWL: Gate way location:
satellite \leftrightarrow earth/satellite range in Footprint
4) SSL: Inter satellite link, cross link
between satellites.

* The Iridium system has 66 satellites in
six LEO orbits, each at an altitude of 780 km
that is used for worldwide voice and data
communication

* Teledesic has 288 satellite in 12 LEO
Orbits, each at a altitude of 1350 km.