

## ORBITAL SPACE: PROBABLE SYSTEMATIC APPROACH OF SATELLITE SIGNAL BARRIERS

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In space exploration, we had a great impact on human species today when we mostly use a scientific approach. We have already reached several significant achievements as like going to the Moon or sending rovers to the Mars. However we are facing many global problems that are waiting to be solved. Sustainable developments of space acquaintance in global technologies are being strongly increasing its various applications as we expand our knowledge in the aspects of 21<sup>st</sup> century. For these types of services from space it is very much essential to rid of technical barriers. Need dedicated communication systems for monitoring and controlling of the satellites tracking and commanding systems to be stable in orbit. Sometimes we face many types of unexpected threats in orbit from different types of objects like UFO, Black Knight Satellite, noctilucent clouds, nacreous clouds or astronomical objects in near-polar orbit of extraterrestrial origin. These objects are creating signal interruption threats day by day to active satellites in orbit. Beside this orbital debris, solar radiation, thermal radiation also creating hazards for signal transmission and generating high energy protons, heavy visible ions, infrared and ultraviolet radiation of electromagnetic spectrum. Global communication deeply depends on satellite technology which needs to protect from colliding with orbital junks like rocket bodies and many other inert objects which have been missing in orbit for decades. Debris collision can do major damage such as destroying solar panels and radio signaling mechanisms of satellites. In this research both advancing optimistic applications and attempting to reduce potential weaknesses of space technology. The background of the research will be the impacts and threats analysis of space technology. The formulation to remove future space barriers for satellites security will be the major concerned in this research.

### Biography

Uttam Banik is Broadcast Engineer in Duronto Television at Dhaka, Bangladesh. He has attended as a Researcher in IEEE Sponsored 2<sup>nd</sup> International Conference for Convergence of Technology 2017 (I2CT), Pune, India. He has completed MSc in Engg in Information Systems Security, Bangladesh University of Professionals (BUP), Mirpur Cantonment, Dhaka, Bangladesh. His study major was satellite security compliances. His research interests are Plasma Physics, Satellite Signal Communication, Cosmic Radiation, Electromagnetic Wave, Radar and Optical Communication, Information Systems Security He has attended a course for Certification of Achievement on Modern Broadcast Technology from National Institute of Mass Communication (NIMC).

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