



CLTP-6



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Resaercher

**National Authority for Remote Sensing and Space
Science (NARSS),**

Space Department, Cairo, Egypt

Education

- B.Sc., Electrical and Electronic Engineering, 1999

- M.Sc ., Electrical Engineering Technology, 2006
 - LEO Satellite Telemetry Systems Design

- Ph.D., Electrical and Electronic Engineering, 2012 (Joint program Egypt and Canada)
 - FEC codes for satellite communication system (TC and LDPC)

- Post Doctor Fellow , Dalhousie University, 2014
 - UAV Communication System
 - Channel modeling

Projects

□ EgyptSat-1 project

- Participated in all Egyptsat-1 Activity, Design, fabrication, launching into orbit 2003 to 2007
- Satellite Altitude 680 Km, weight 150 Kg
- In orbit operation 2007 – 2010
- Camera Resolution 8.5 meter
- Telemetry system Engineer



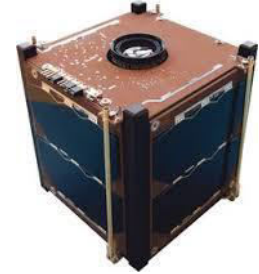
□ Forward Error Correction Codes for satellite data transmission.

- Building a FEC simulation model based on Matlab
- Improving the correction rate by Proposing some modifications to an existing algorithms.

Projects

- EgyCubesat-1

- System Engineer of the EgyCubeSat.



- UAV (Unmanned Aerial Vehicle) Communication System

- Finding a better communication system to be used over the UAVs
 - UAV channel modeling



Why CanSat Project

- ❑ Due to high cost of space industry , and less satellite projects running by the government, and to..
- ❑ Keep the knowledge gained of space science
- ❑ Transfer space technology to undergraduate students with minimum cost
- ❑ Finding a way to spread the word of space technology between university students , make them ready to participate in satellite projects like, CubeSat , and SmallSatellite.