



UNISEC-EGYPT:

Towards Building and Launching our First satellite

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Outline

- **History of UNISEC-EGYPT.**
- **The Egyptian and African space Agencies.**
- **UNISEC-EGYPT 2019 activities.**
- **Future Plan.**

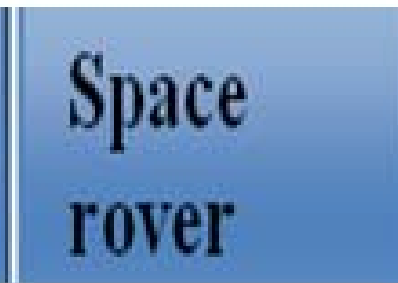
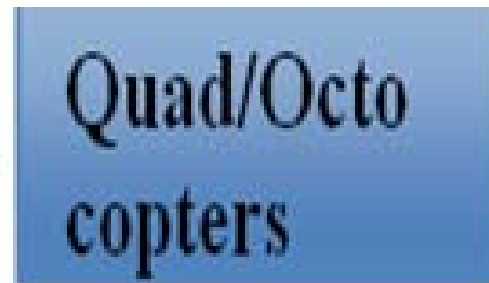
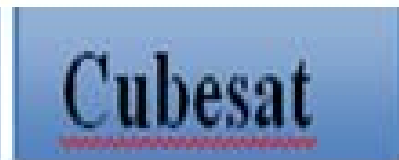
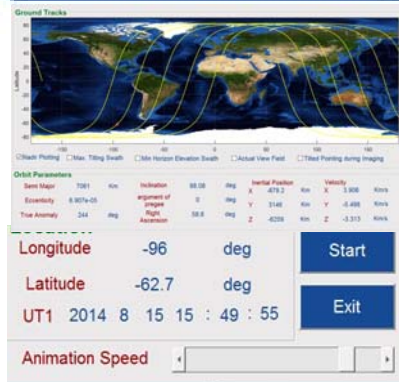
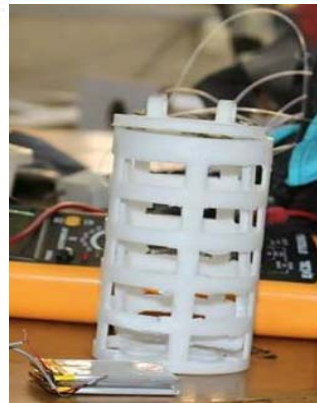


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History

- SSTLab (established in 2011) is the host of All Unisec-Egypt (established in 2014) activities in Cairo



The Egyptian and African space Agencies



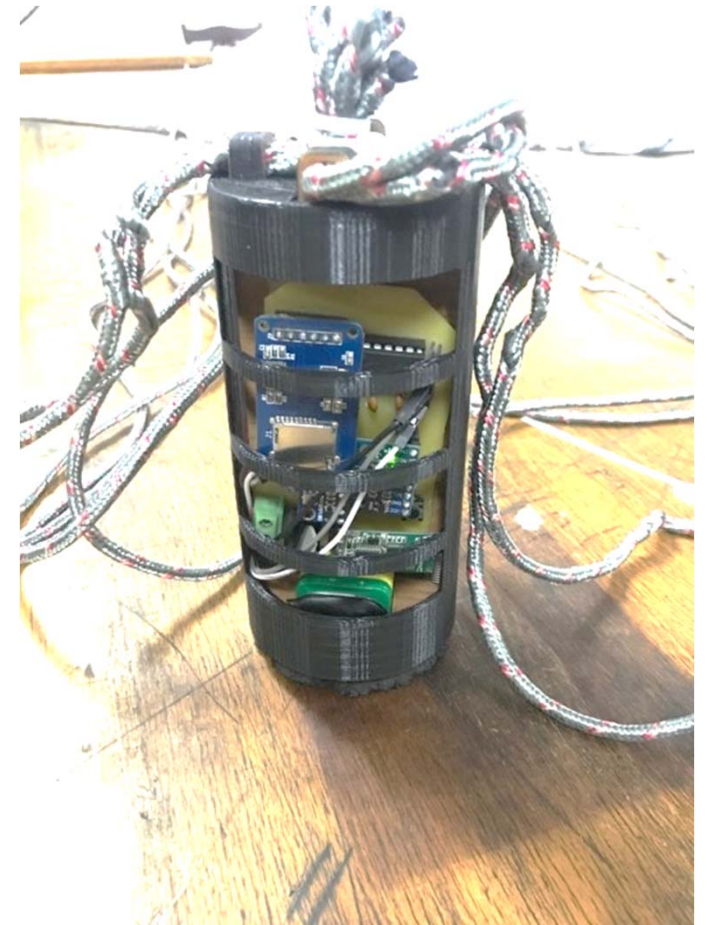
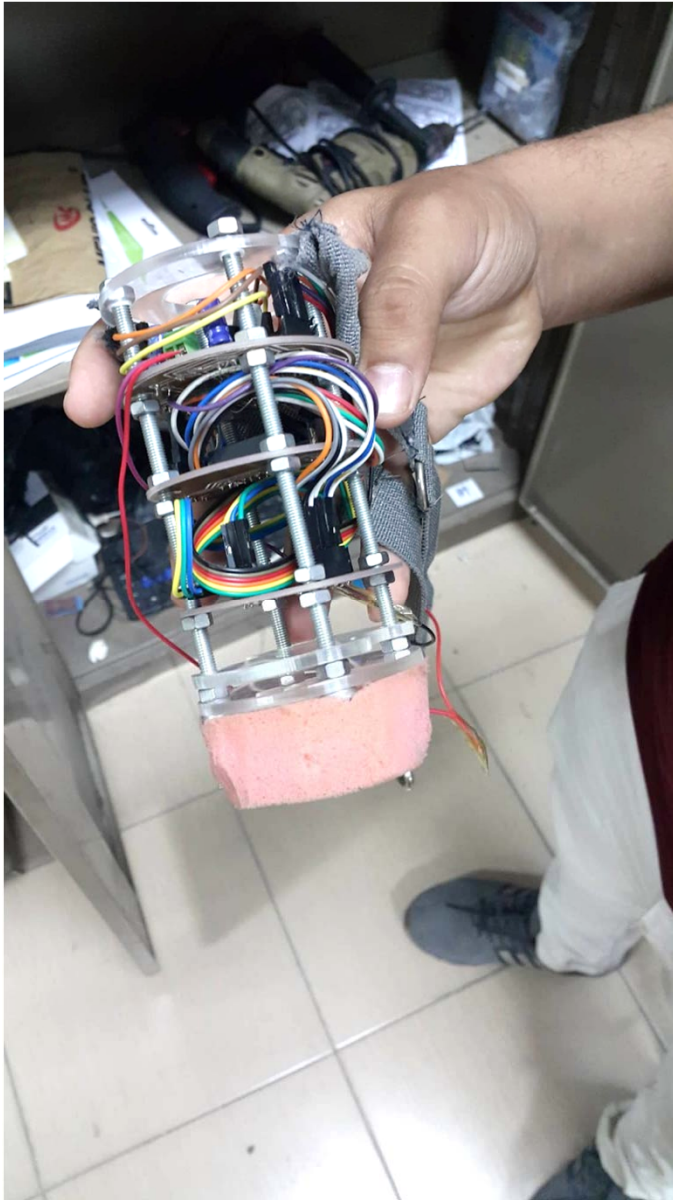
- The Egyptian space Agency was established this year.
- Egypt is also selected as the host of the African Space Agency.
- Aerospace Department, Cairo University will be the main source for Engineers and researchers in the new agencies (We have to prepare for that).

CanSat Training Program (CTP)

- This year the laboratory succeeded to hold two trainings of the CanSat Training Program, (CTP9) and (CTP10).



CanSat Training Program (CTP)



- The trainings were organized to 50 students from different universities, including Cairo, Helwan, Benha and Beni-Suif universities.



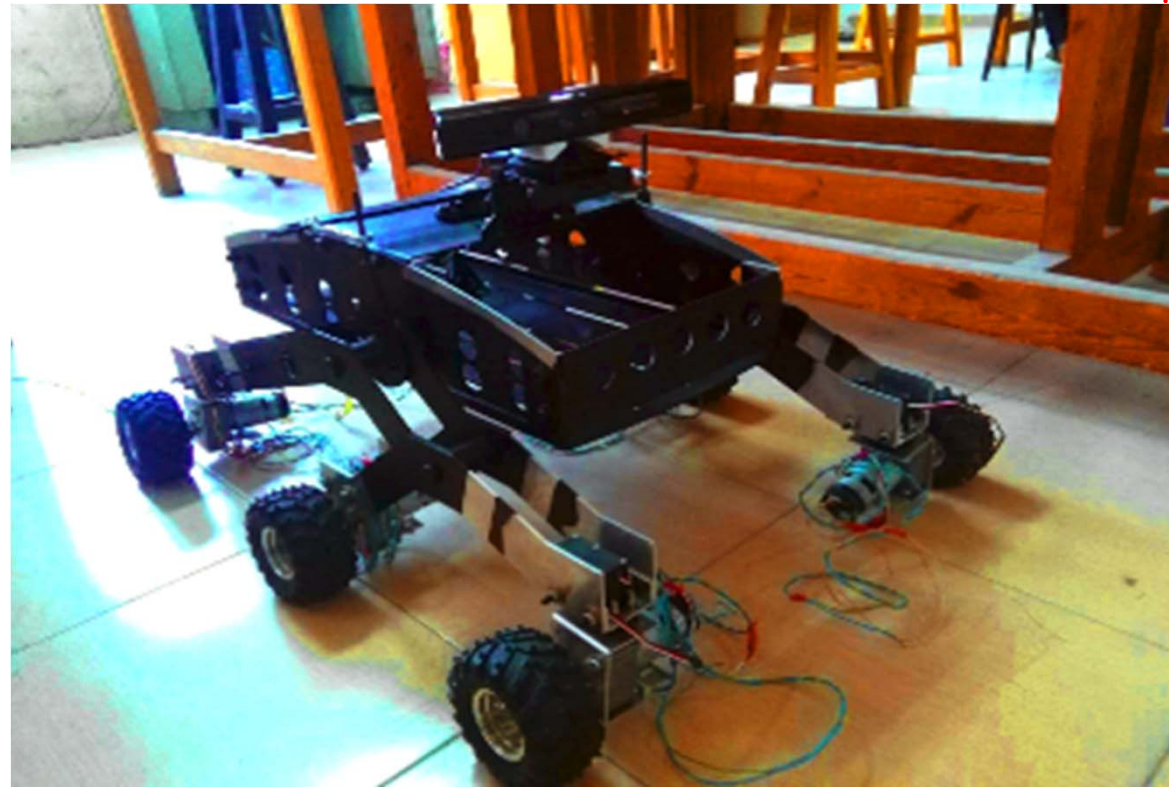
ARLISS2019

- *Participated in ARLISS in 2014, 2015, 2016 , and 2019*



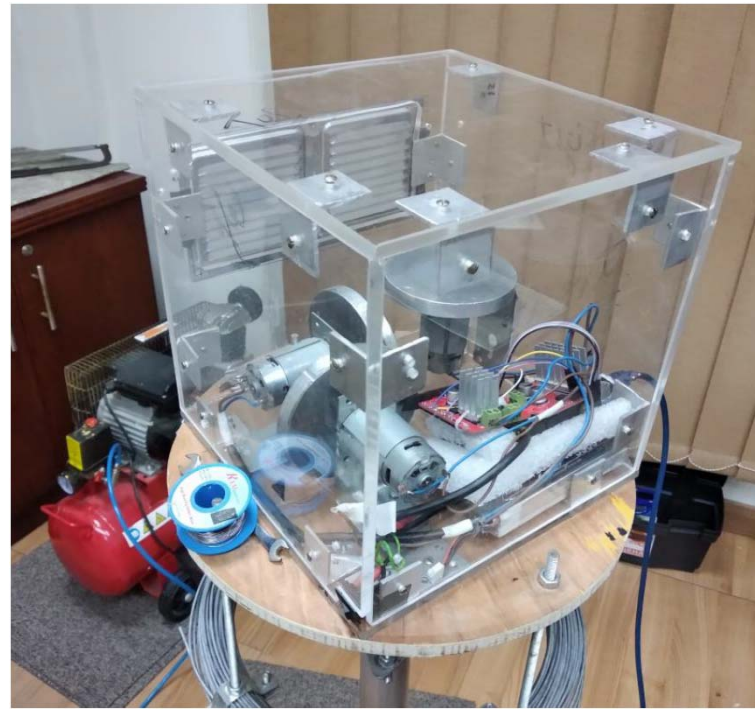
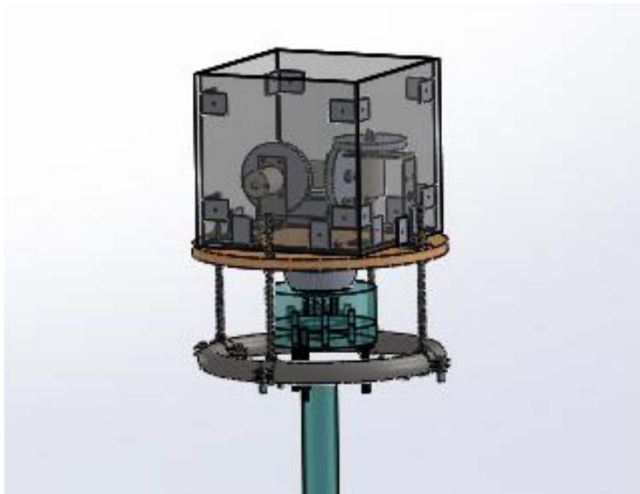
Mars Rover

Our Mars Rover team have worked through the academic year of 2018/2019 on Modelling, Design and Fabrication of the first iteration of the Space Rover for Autonomous Exploration. This project is fully funded by Boeing.



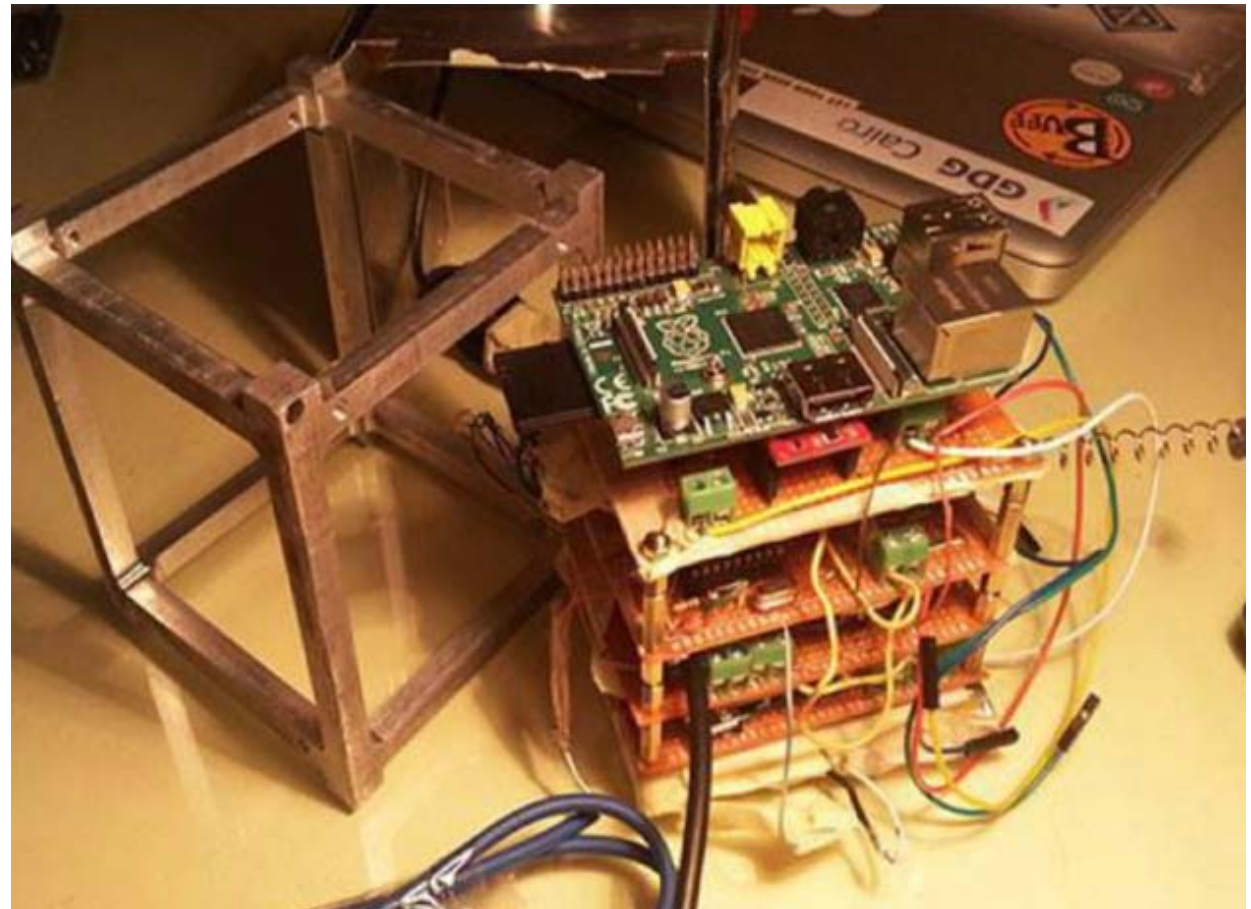
Satellite Attitude Control Testbed CUS

Cairo University Satellite Attitude Control Testbed (CUSACT-1) is a 3-axis stabilized, air bearing-based testbed capable of simulating the space environment.



Cairo_sat Cube Satellite

- The fifth development iteration to design, fabricate and test of 1 U CubeSat for Remote Sensing Applications. This project is funded by Boeing.



Plan for 2020 and beyond

- *Continue can sat education for fresh students.*
- *Fifth iteration of Cubesat design.*
- *Cooperation with the Egyptian space agency.*
- *Upgrading our Space systems and technology lab.*
- *Cooperation with Kyutech (exchange of students and staff, testing Cubesats, training, etc. and will sign MOU soon).*
- *Launch Cairo-Sat first university satellite in Egypt (estimated 2022).*

