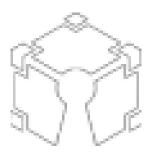
Open Source CubeSat Workshop 2018



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CanSat: The best way to start getting involved in space

Monday, 24 September 2018 11:40 (20 minutes)

The idea of simplifying space missions by using CubeSats and CanSats appeared around 20 years ago with the main purpose of making space technologies accessible to a broad audience. Both platforms proved to be a game changer in the space sector up to the point nowadays that anyone can start developing space related missions from home.

The CanSat platform has been used as the perfect cultivation pot to promote STEM fields among the young generations and inspire the soon to become engineers and scientists. It is the perfect introduction to space science and technologies while usually being the first experience into a simulation of a real space mission.

An Open Source development platform at those first stages has proven to be of high impact and interest not only for Secondary and High Schools students but also at University level. Open Cosmos developed qbcan, a CanSat development kit composed of affordable COTS with the idea of simplifying the process of getting people involved into software and electronics using space as a context. A set of educational wiki pages were created with libraries and sample codes so that even non-technical and non-experienced users could easily assemble a CanSat and conduct a primary mission. A forum was also created and maintained to provide support to the increasing CanSat community with all the designs and list of components available following the Open Source philosophy.

The presentation will review the rationale behind the qbcan open source platform, highlighting the CanSat concept and its contribution in making space more accessible. A short demonstration and hands-on workshop could be also considered for the audience to understand much better the platform and components used.

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