

A Summer of Code on Mars

The Italian Mars Society (IMS) is a non-profit organization, existing from 2004, as Italian branch of the International Mars Society, created in the USA by Robert Zubrin. IMS is a member of the Mars Society European network. The foundation scope of the Italian Mars Society is to promote research projects devoted to Mars Exploration and the involvement of small and large enterprises in the new economy related to space exploration. IMS is currently spearheading the European MaRS Analog Station for Advanced Technologies Integration ([ERAS](#)) project. ERAS' main goal is to provide an effective test bed for field operation studies in preparation for human missions to Mars. We are currently working on an immersive Virtual Reality simulation of the ERAS Station (V-ERAS) based on the Oculus Rift VR headset. The major advantage of such virtualization is that it will be possible to undertake training sessions with a crew that can interact with its future environment before the actual station is built. In parallel to this VR effort we are engaged on robotic projects. We intend to use Virtual/Augmented reality to progress on the field of Human-Robot Interaction (HRI) that will be a key element for planetary exploration.

A relevant part of the software supporting V-ERAS has been developed by students during summer of code events. We have participated to Google Summer of Code (GSoC) on 2013 and 2014 and we are participating this year under Python Software Foundation umbrella. We have applied and we have been selected for this year also for **SoCiS**: The "[ESA Summer of Code in Space](#)", a GSoC-inspired, yet different event sponsored by the European Space Agency.

If you are a student interested in contributing code to the ERAS project you should start by visiting our GSoC and SoCiS project ideas pages witch contains a list of suggested projects:

- [SoCiS Project Ideas page](#)
- [GSoC Project Ideas page](#)

You may decide to work on these ideas or use them as a starting point for your own. Either way, come talk to us on the erasproject@googlegroups.com mailing list and on our IRC channel #IMS on Freenode.

The application deadline for GsoC is 27 of March and for SoCiS is 30 of April.