OLYMPUS MONS

Design & Development Tool

Journey2Mars, SpaceRoute66

We're creating a tool to collaborate in the design, development and manufacturing the infrastructure needed for a base in Mars, considering ambient conditions, challenges and materials.

GOALS:

- Create an open data base of editable prototypes and models. For this purpose, we're going to use existing technologies such as parametric design programs, 3D printers, scanners and cloud computing.
- Build space bases in Mars using virtual reality and prototypes made in Earth and sent to Mars through satellites. This way a technician can use virtual reality to recreate a location to place ramps, shelters and other buildings. Also, people in Earth can create or scan prototypes to manufacture tools or devices and send the information. Once in Mars, this information is received and used by robots to create the base.
- In case of emergency, robots may use the data base to repair or manufacture any tool or piece.

RESOURCES

CAD/CAM

Arquitectura y Diseño paramétrico:

http://www.evolo.us/architecture/parametric-designed-performative-system-for-outer-space-habitat-opensystems/

Datos abiertos brindados por NASA referentes a Marte.

https://data.nasa.gov/data?category=Space%20Science&search=Mars&type

Modelos 3D de la NASA (Github)

https://github.com/nasa/NASA-3D-Resources

Aplicaciones de la Impresión 3D por la NASA

http://www.fool.com/investing/general/2014/09/21/nasa-and-elons-musk-spacex-make-3d-printing-histor.aspx

All about CAM machines

http://www.cam-machine.com

Modelos 3D de Marte y puntos en el Espacio

http://nasa3d.arc.nasa.gov/models

Llevar el Espacio a la Tierra

http://www.space.com/731-nasa-spin-offs-bringing-space-earth.html

Un cohete creado por impresión 3D por la NASA

http://www.designnews.com/author.asp?doc_id=266159

Una explicación sobre qué es CAD

https://en.wikipedia.org/wiki/Computer-aided_manufacturing

APIs de la NASA

https://api.nasa.gov