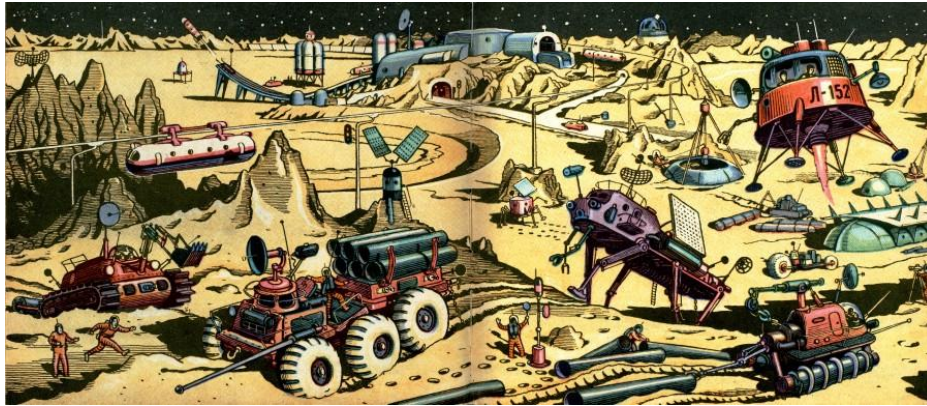


## Internship R&D « Development of virtual environment and gameplay for lunar teleoperation simulator (Unity3D / C#) »



We study human-robot interaction to improve safety and enhance performance for space operations. The goal is to apply a neuroergonomic approach to cosmonauts' professional tasks assessment. To that end, we participate in a SIRIUS-20 project (IMBP, Moscow, Russia) where a group of 6 subjects simulate interplanetary mission of 8 months. The project employs a simulated rover to perform predefined trajectories using a joystick, avoid collisions with obstacles, perform samplings on dedicated targets, return to the station for sample analysis and for picking up pallets to build four modules (i.e. north, west, east and south wings of a moonbase).

The intern will design and implement a virtual environment and gameplay (according to an established scenario) of a simulator that includes tasks of moonbase construction and sampling. The development will be done in the Unity 3D environment.

**Duration:** 5-6 months

**Requirements:** C#, experience in Unity 3D, VR/Gaming experience, notions of 3D modeling will be appreciated

**Submit CV/LM** by email to [vsevolod.peysakhovich@isae-supero.fr](mailto:vsevolod.peysakhovich@isae-supero.fr) with topic "Internship Unity"