Debris App

Columbia Space Initiative, Hackathon 2019

- *Software Track Winner* 🥇

https://columbiaspace.org/spaceathon/

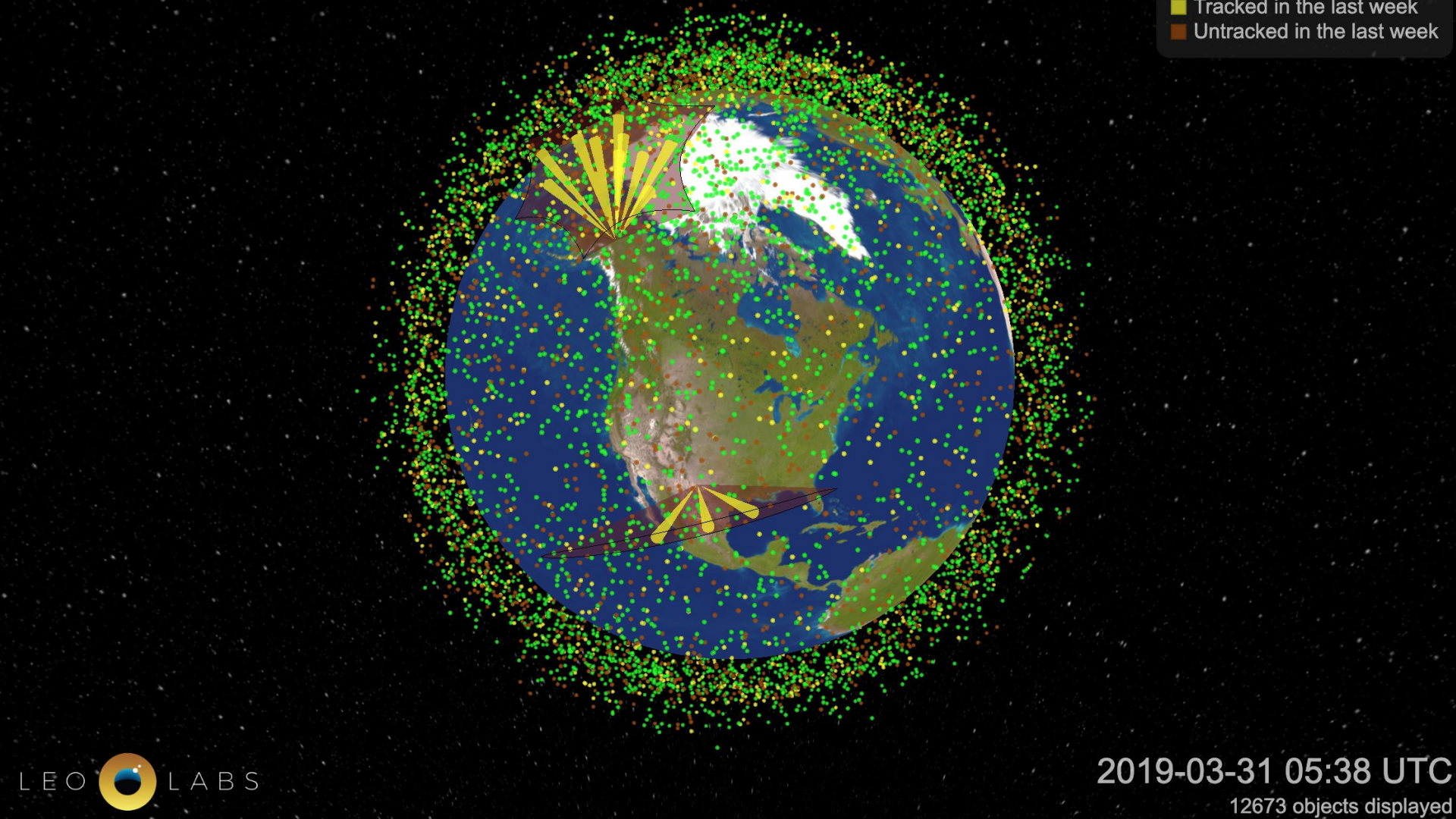
Marco Montalto Monella

Overview

Debris App allows users to explore and become aware of the amount of detectable debris in LEO (Low Earth Orbit).

In order to achieve this it has two main features:

- Showing debris in AR (*skyview*)
- Number of debris collision if an object of a given size is thrown into orbit from a given location


Tracked in the last week
Untracked in the last week
LEO LABS
2019-03-31 05:38 UTC
12673 objects displayed

Goal

“Increase awareness on the topic”

Target Audience

General Space Education Community

High School Students

Space Enthusiasts

Technology

Expo

- **Portability**
- **Ease of development**

Data Sources

- **LeoLabs Space API**
  - **https://www.leolabs.space**

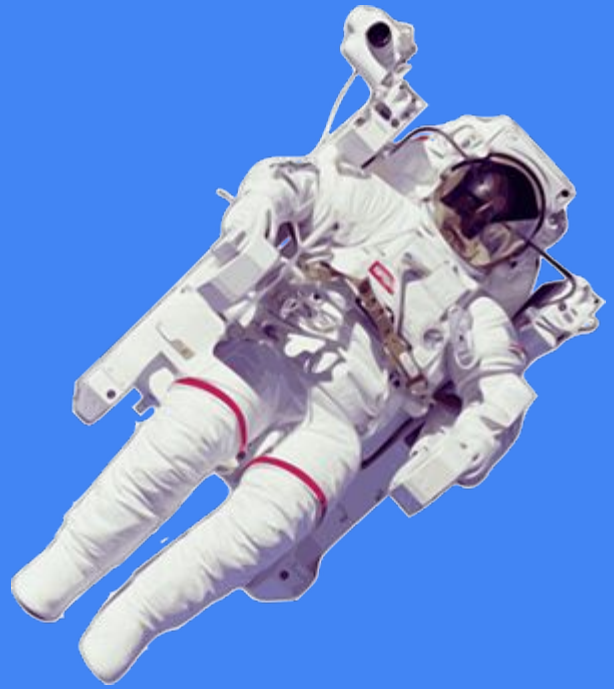
Challenges

Convert from ECI to LLA

Show State Vector using device gyroscope in ECI

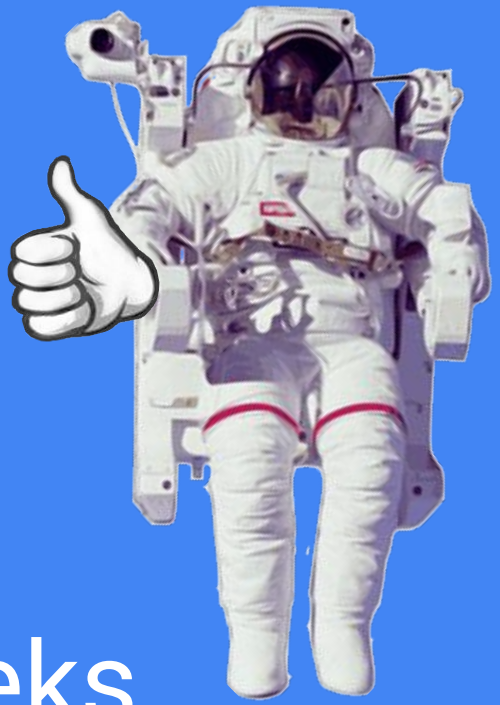
Time & Team Size

Live Demo

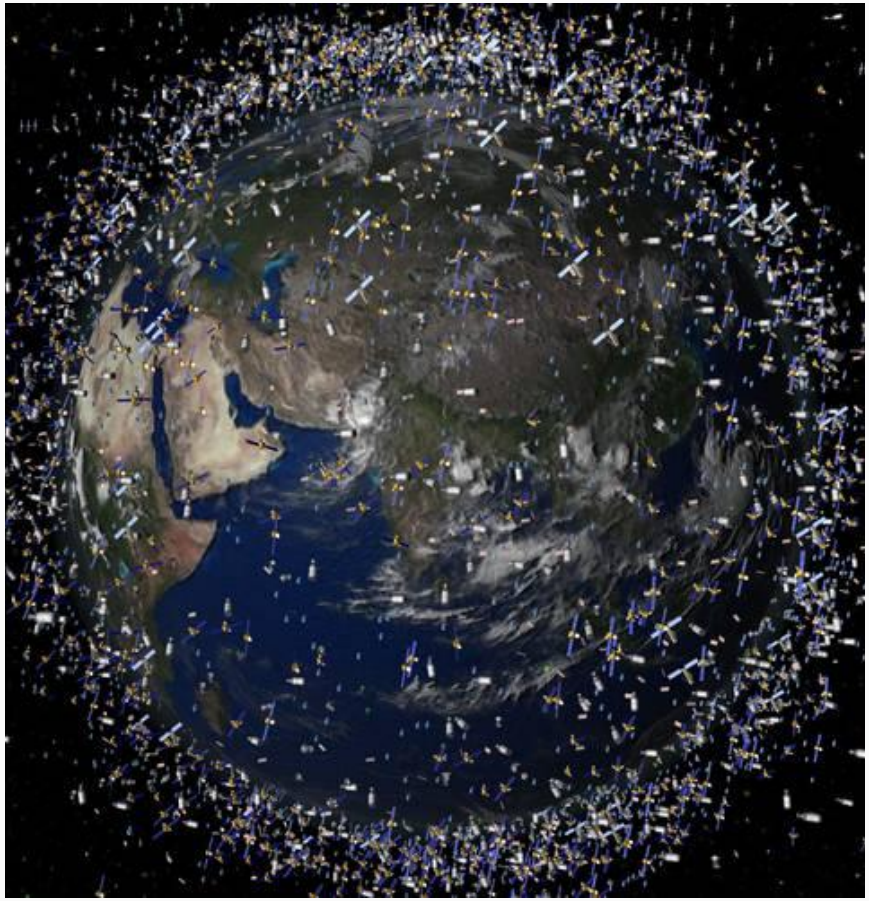


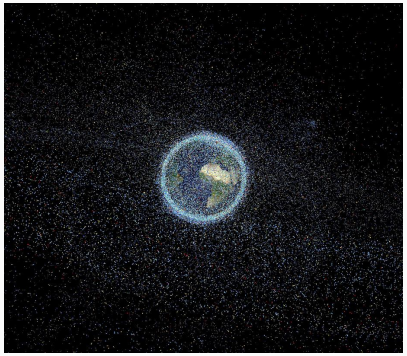
Predicted Completion Time

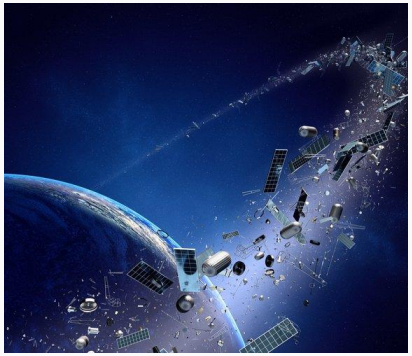
(for a first real alpha version)



~1-2 weeks







Thanks for listening

Space exploration is a force of nature unto itself that no other force in society can rival.

Neil deGrasse Tyson

Contact

Marco Montalto Monella
www.mmmarco.com

Reach out if you're interested in joining me into the development project.