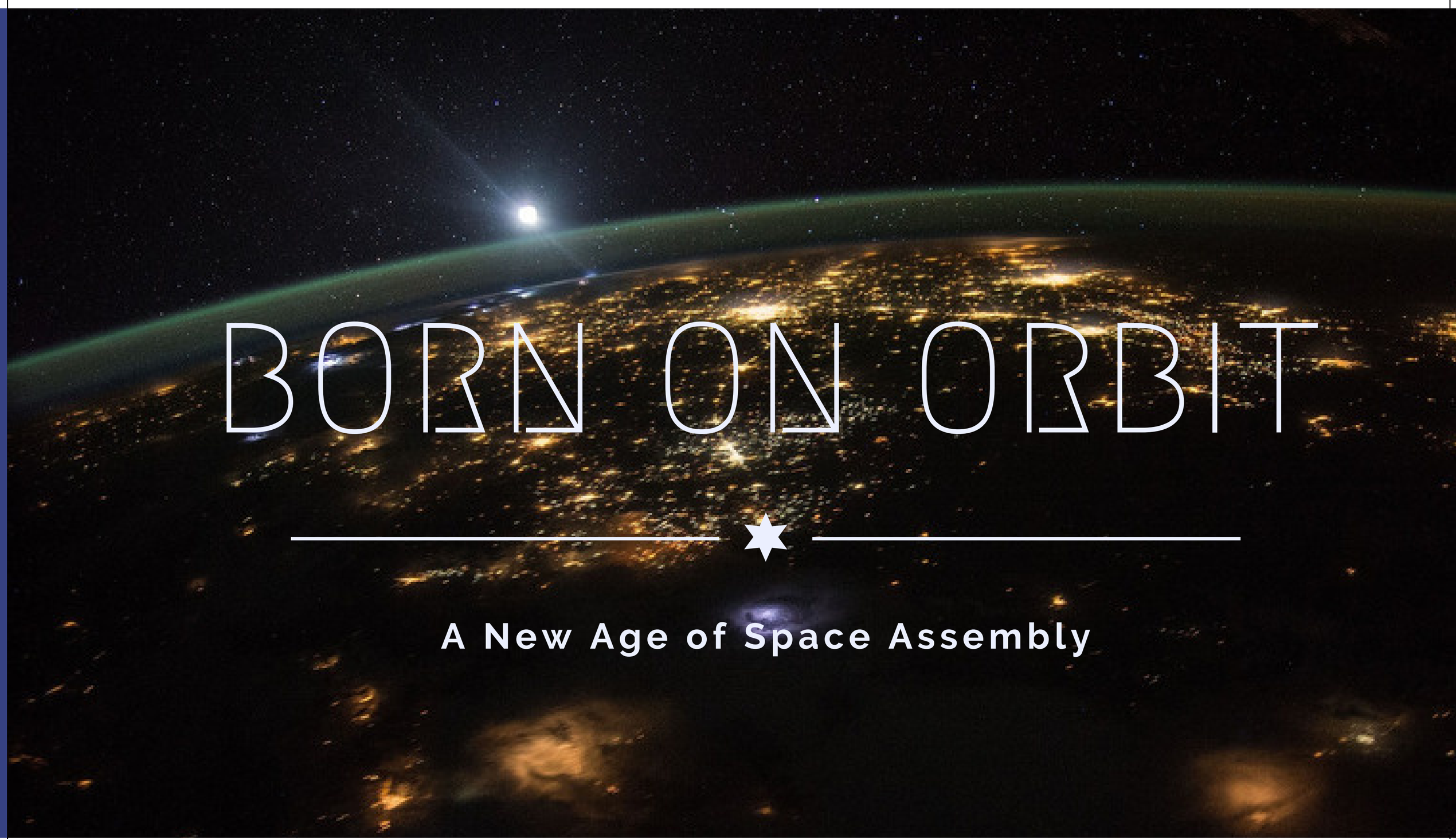


BORN ON ORBIT

A New Age of Space Assembly

MEET OUR SUPER TEAM

ABIR BELKHAIR

Electrical
Engineering
Student

SALMA ACHAQ

Electromechanical
Engineering
Student

PROJECT OUTLINE

What to Expect From Us

Who We Are

Our Motivation

Problematic Statement

Our Solution

Impact & Vision

OUR MOTIVATION

Get to Know Us

PROBLEMATIC STATEMENT

Problems and Challenges

Transportation of Larger Structures to Space

Hazardous Human Space Flights

Highly Expensive Costs of Big Space Missions

Unreliability of Robotic Arm's Operations in Space

OUR SOLUTION

BECAUSE SPACE NEEDS TO BE SMART TOO

OUR SOLUTION CORE'S CONCEPT

MAKING SMART BUILDING BLOCKS TO BE SELF ASSEMBLED IN SPACE

TRAINING ALGORITHMS (AI/ML) TO MAKE DECISIONS

USING DIGITAL TWINS AND AR

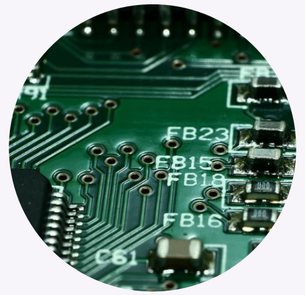
LAUNCHING MAIN PART FIRST AND THEN CONNECTED B-B

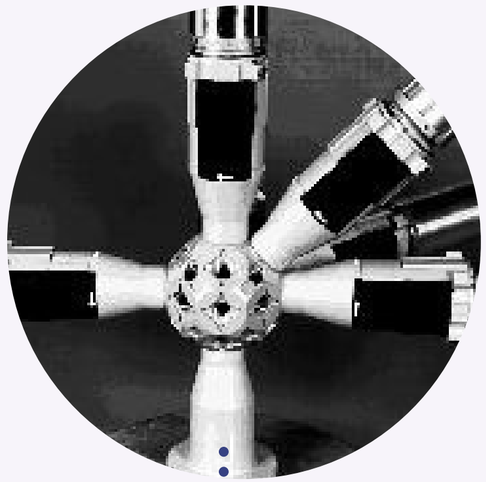
SMART ASSEMBLY

SMART BUILDING BLOC

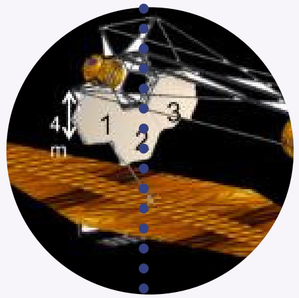
Artificial Intelligence

Microcontrollers

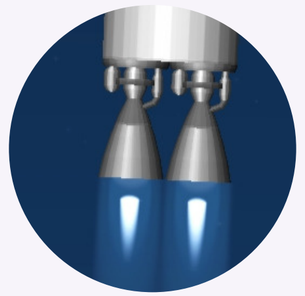




Cameras & Sensors



Structures



Jet Propulsion

ADVANTAGES

We have covered.

- SMALL & LIGHT
- COST EFFECTIVE
- HIGHER PRECISION
- ENVIRONNEMENTAL STABILITY & DURABILITY
- MANUFACTURABILITY
- RELIABILITY & SECURITY

MODEL INPUTS

Assembly Strategies

Orbit Design

Vehicule Design

MODEL OUTPUTS

Metrics / Dimensions

DATA USED

Data is the New Oil.

History of previous space risks ,previous failures & accidents

Space Environnement (Weather,radiation...)

Models,RCS & vehicles design & orbits parameters

IMPACT

SAVE ASTRONAUTS LIFE

REDUCE MISSION COSTS

ALLOW SCIENTISTS & RESARCHERS TO EXPLORE LIFE FORMS IN DEEPER SPACE

OUR VISION

We're aiming that our smart building blocks will be fully autonomous, re-usable and able to make right decisions as well as being reconfigurable depending on the nature of each task to enable us to dig deeper in space.


Thank
you