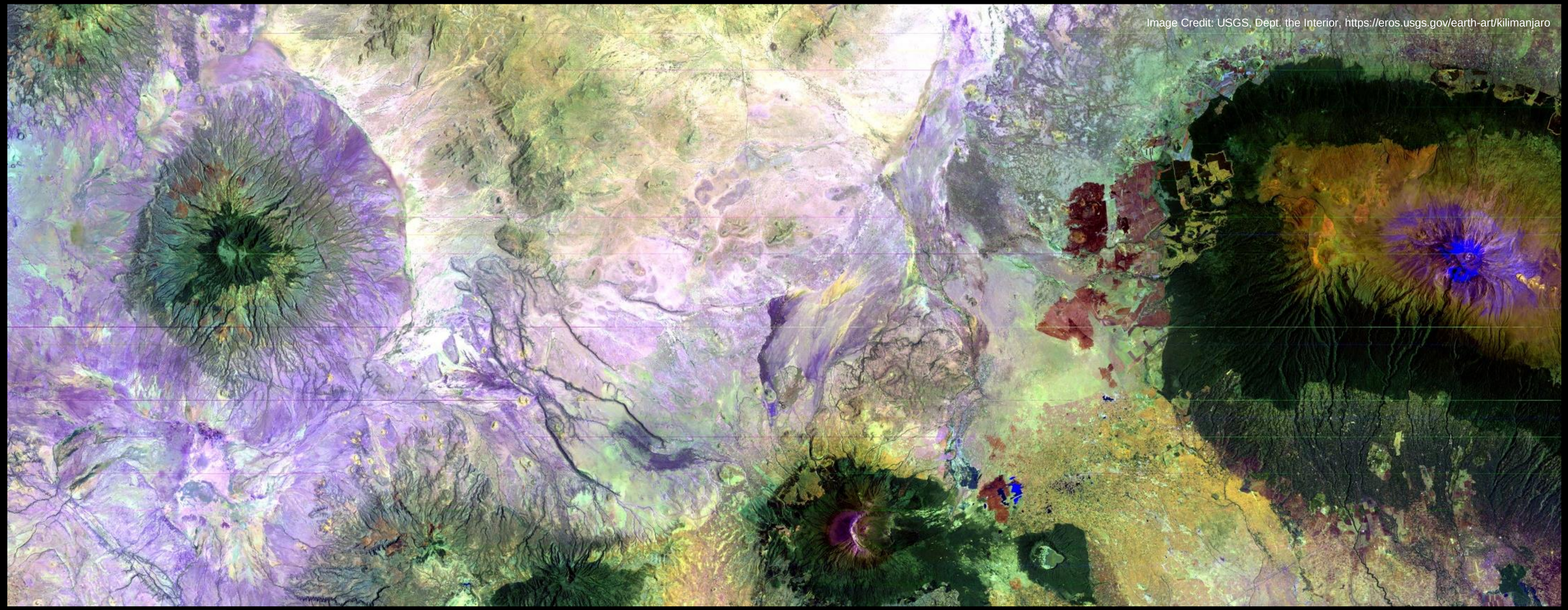
Coordination Mechanisms and Resources to Realize the Sustainable Development Goals

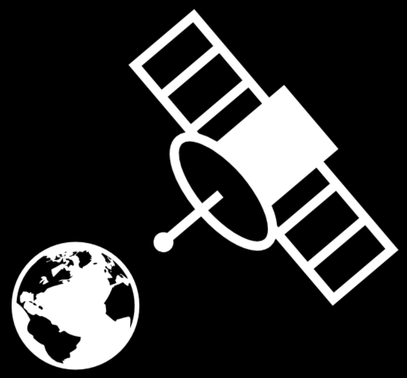


Dr Minoo Rathnasabapathy, PhD
Research Engineer

Advancing justice in Earth’s complex systems using designs enabled by space

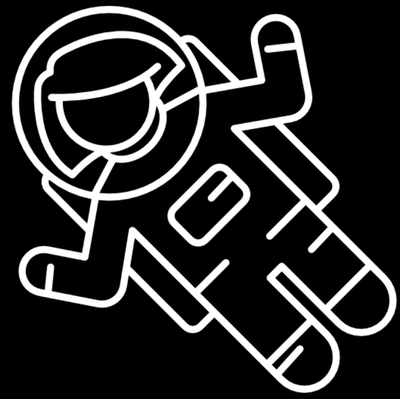
space enabled

Six space technologies currently support the Sustainable Development Goals



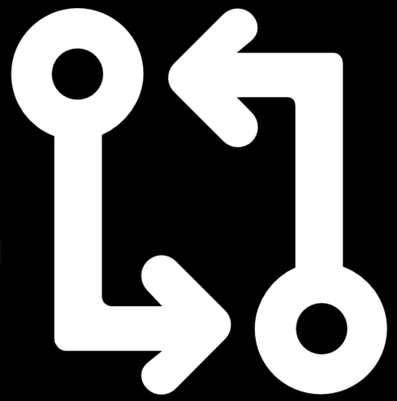
Satellite Earth Observation

Satellite Positioning & Navigation

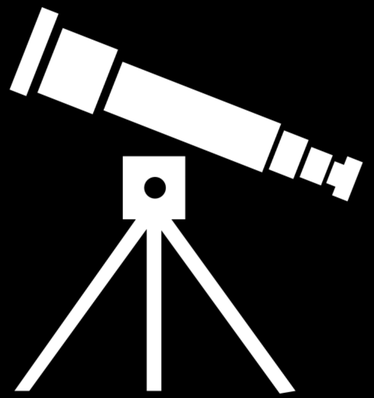


Human Space Flight & Microgravity Research

Satellite Communication



Space Technology Transfer



Inspiration from Research & Education

Image Source: https://freepik.com


1 NO POVERTY
2 NO HUNGER
3 GOOD HEALTH
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 RENEWABLE ENERGY
8 GOOD JOBS AND ECONOMIC GROWTH
9 INNOVATION AND INFRASTRUCTURE
010 011
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE AND JUSTICE
17 PARTNERSHIPS FOR THE GOALS
THE GLOBAL GOALS
For Sustainable Development

Institutions

Governments

Entrepreneurs

Universities

Institutions

- Multilateral and non-government organizations work in collaboration with country governments and the private sector

- Recognizing the need to improve and coordinate observation systems across all societal benefit areas aimed at closing the existing gaps

- Strong advocacy of open data-sharing policies and practices


AfriGEOSS
EARTH OBSERVATIONS FOR AFRICA
AFRIGEOSS WEEK 2018
22-29 June 2018 / Libreville, Gabon
#EO4AFRICA

Governments

- Challenges and barriers still exist (eg. lack of fully developed infrastructure for cross-sectorial and integrated applications, ...)

- Complex International Science, Technology & Innovation Partnerships
  - Instrument for national technological development through cross-border learning

- Opportunities are being increasingly made available to join international space projects

GODDARD SPACE FLIGHT CENTER

+ Visit NASA.gov

+ AEROSOL OPTICAL DEPTH | + AEROSOL INVERSIONS | + SOLAR FLUX | + OCEAN COLOR | + MARITIME AEROSOL

Web Site Feature — **AERONET Data Synergy Tool - Access Earth Science data sets for AERONET sites**

-Home

Home

+ AEROSOL/FLUX NETWORKS
+ CAMPAIGNS
+ COLLABORATORS
+ DATA
+ LOGISTICS
+ NASA PROJECTS

5 January 2018 - Version 3 Level 2.0 AOD and SDA products are now available.

11 January 2018 - Version 3 Level 1.5 and Level 2.0 Almucntar inversion products are now available

MISSION

The AERONET (**AE**rosol **RO**botic **NET**work) project is a federation of ground-based remote sensing aerosol networks established by **NASA** and **PHOTONS** (PHOtométrie pour le Traitement Opérationnel de Normalisation Satellitaire; **Univ. of Lille 1, CNES,** and **CNRS-INSU)** and is greatly expanded by networks (e.g., **RIMA, AeroSpan**, **AEROCAN**, and CARSNET**)** and **collaborators** from national agencies, institutes, universities, individual scientists, and partners. Fo more than 25 years, the project has provided long-term, continuous and readily accessible public domain database of aerosol optical, microphysical and radiative properties for aerosol research and characterization, validation of satellite retrievals, and synergism with other databases. The network imposes standardization of **instruments**, **calibration**, **processing** and **distribution**.

AERONET collaboration provides globally distributed observations of spectral aerosol optical depth (AOD), inversion products, and precipitable water in diverse aerosol regimes. Version 3 AOD data are computed for three data quality levels: Level 1.0 (unscreened), Level 1.5 (cloud-screened and quality controlled), and Level

https://aeronet.gsfc.nasa.gov/

Entrepreneurs

- Start-ups are using innovative aerospace based solutions to create new opportunities and novel solutions to pressing social and economic challenges

- Funding initiatives have increased to support the development of applications

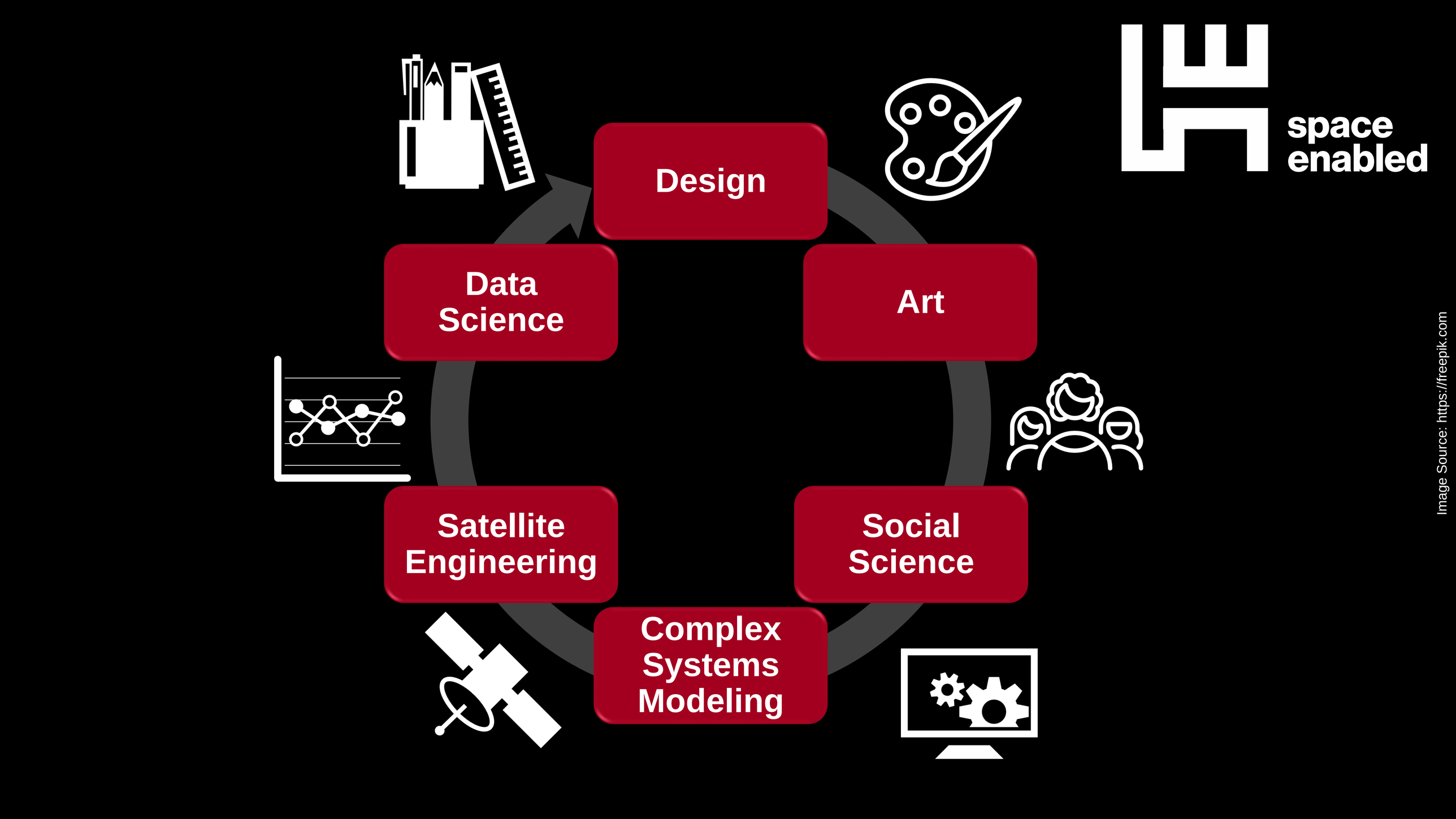
AIRBUS BIZLAB & MAKE-IT IN AFRICA JOINT ACCELERATOR PROGRAMME

WE PROMOTE DIGITAL INNOVATION FOR SUSTAINABLE AND INCLUSIVE DEVELOPMENT

The #Africa4Future Joint Accelerator

Universities

- Engagement in collaborative knowledge generation alongside other stakeholders
- Capacity to generate, translate, and disseminate knowledge relevant to achieving the SDGs
- They can work with policymakers and other stakeholders to identify and evaluate capacity-building outcomes
- Provide an ideal environment through teaching and research to shape the next generation in areas of sustainable development


Design
Art
Social Science
Complex Systems Modeling
Satellite Engineering
Data Science
space enabled
Image Source: https://freepik.com

Advancing justice in Earth's complex systems using designs enabled by space

minoo@mit.edu

spaceenabled.media.mit.edu

@space_enabled

@space.enabled

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