



Artificial Intelligence at NASA

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Artificial Intelligence drives how NASA explores our universe, revolutionizes air transportation and sends humans to the Moon, Mars, and beyond.

AI and Autonomy are Deeply Intertwined

PROTECT & IMPROVE
LIFE ON EARTH &
IN SPACE

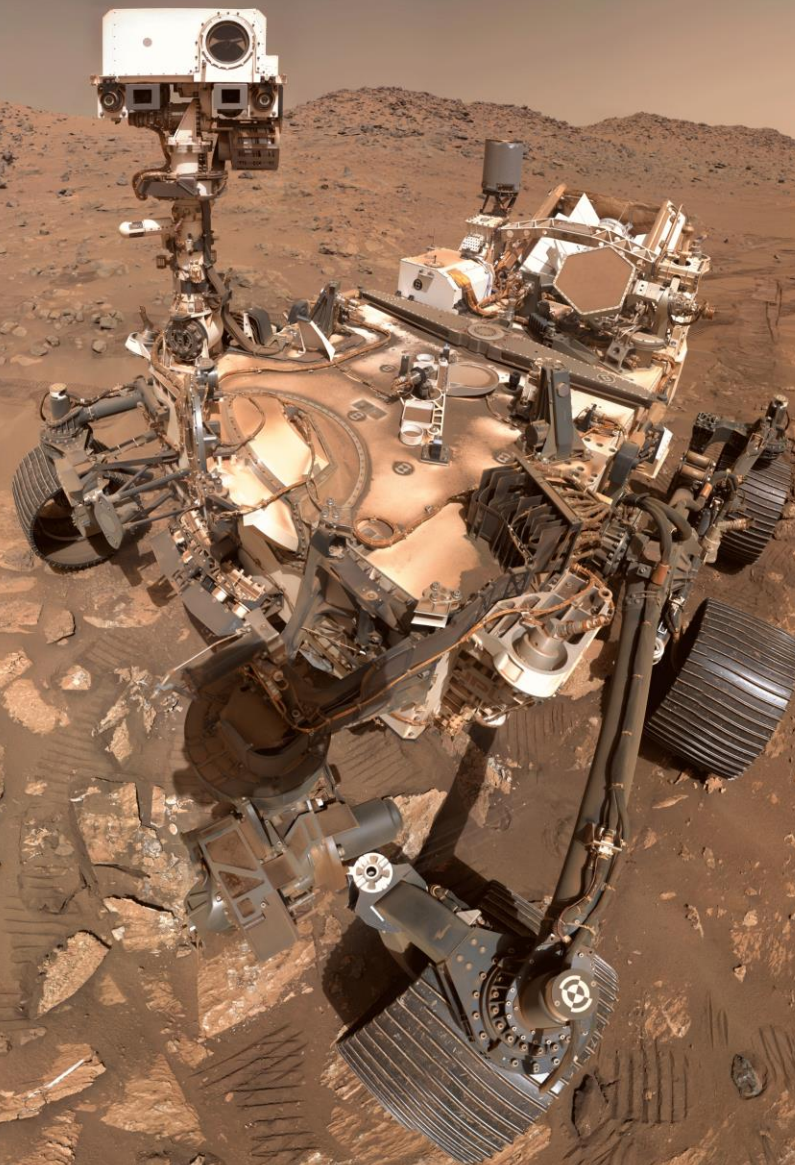
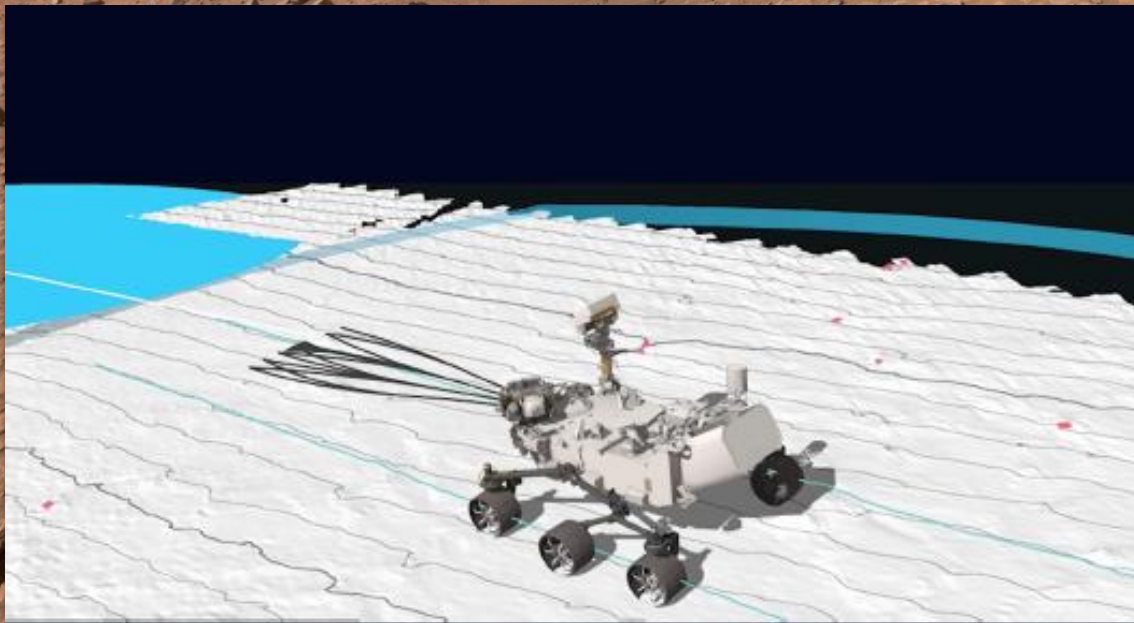
SEARCH FOR LIFE
ELSEWHERE

DISCOVER SECRETS
OF THE UNIVERSE

HUMANITY'S RETURN TO THE MOON



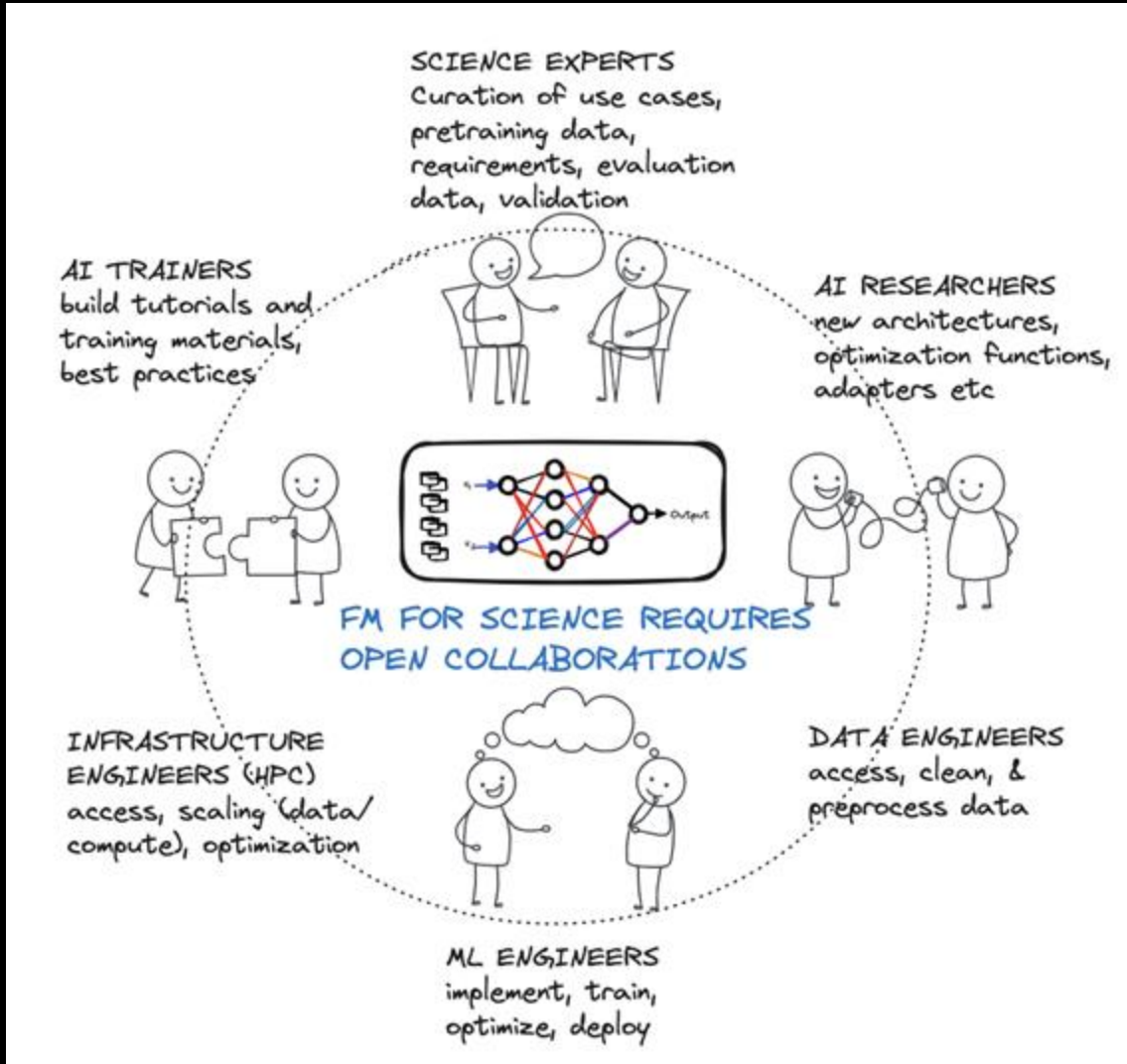
Mars Rover Operations: Perseverance





5+1 AI for Science Strategy

Science Foundation Models are Built on Collaboration



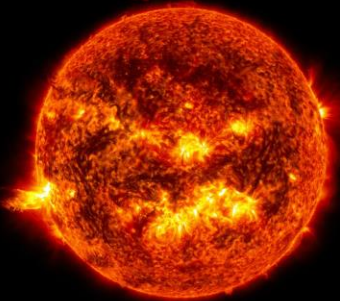
- **Interdisciplinary Problem-Solving:** Foundation models often address complex, multi-disciplinary problems
- **Diverse Skill Sets:** Collaboration among ML engineers, data engineers, and domain scientists leverages complementary expertise
- **Compute and Infrastructure Optimization:** High-performance computing (HPC) engineers ensure that compute resources meet the scalability demands
- **Incorporating End Users:** Such as researchers, operational scientists, or decision-makers help ensure the model outputs are actionable, understandable, and aligned with priorities

NASA/IBM AI Foundation Models for Science



Prithvi Geospatial

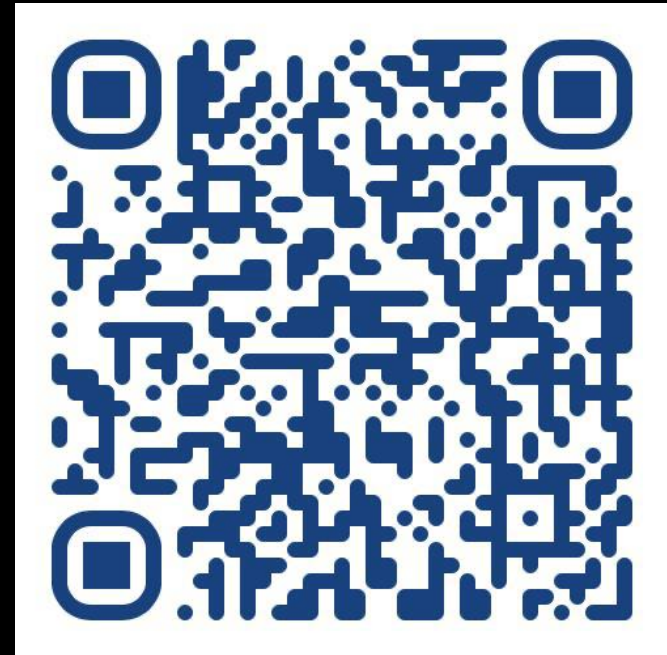
Prithvi Weather



Surya Heliophysics



Lunar (Coming soon)



<https://science.nasa.gov/artificial-intelligence-science/>