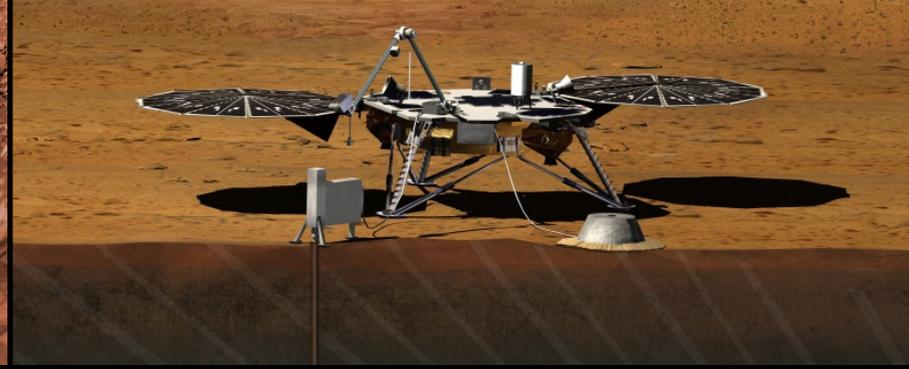
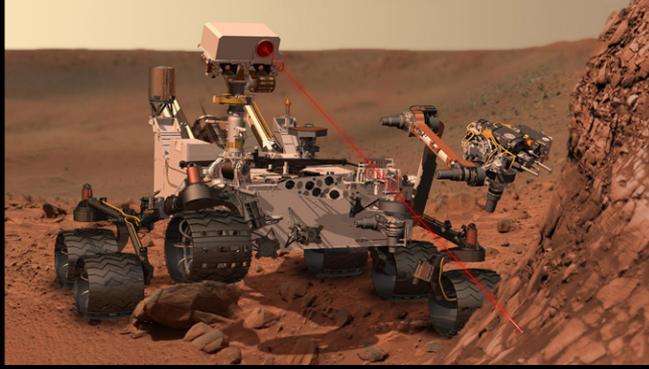




Jet Propulsion Laboratory  
California Institute of Technology



# JPL Robotics

Kyle Edelberg

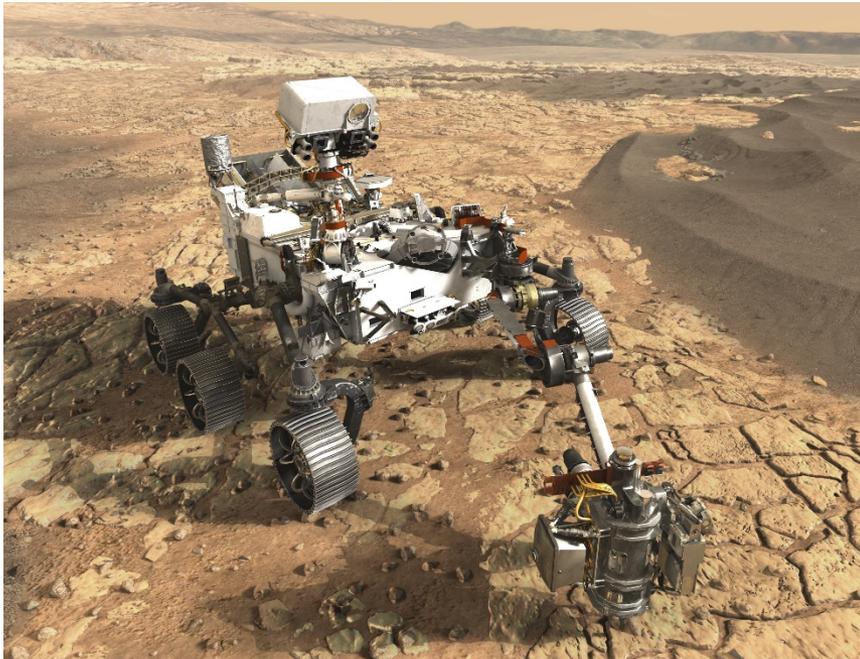
*Robotic Manipulation and Sampling Group  
Mobility and Robotic Systems Section  
Jet Propulsion Laboratory  
California Institute of Technology*

*December 5<sup>th</sup> 2017*



# My Background

**Current:** Autonomy Lead for Coring:  
Mars 2020 Rover Mission

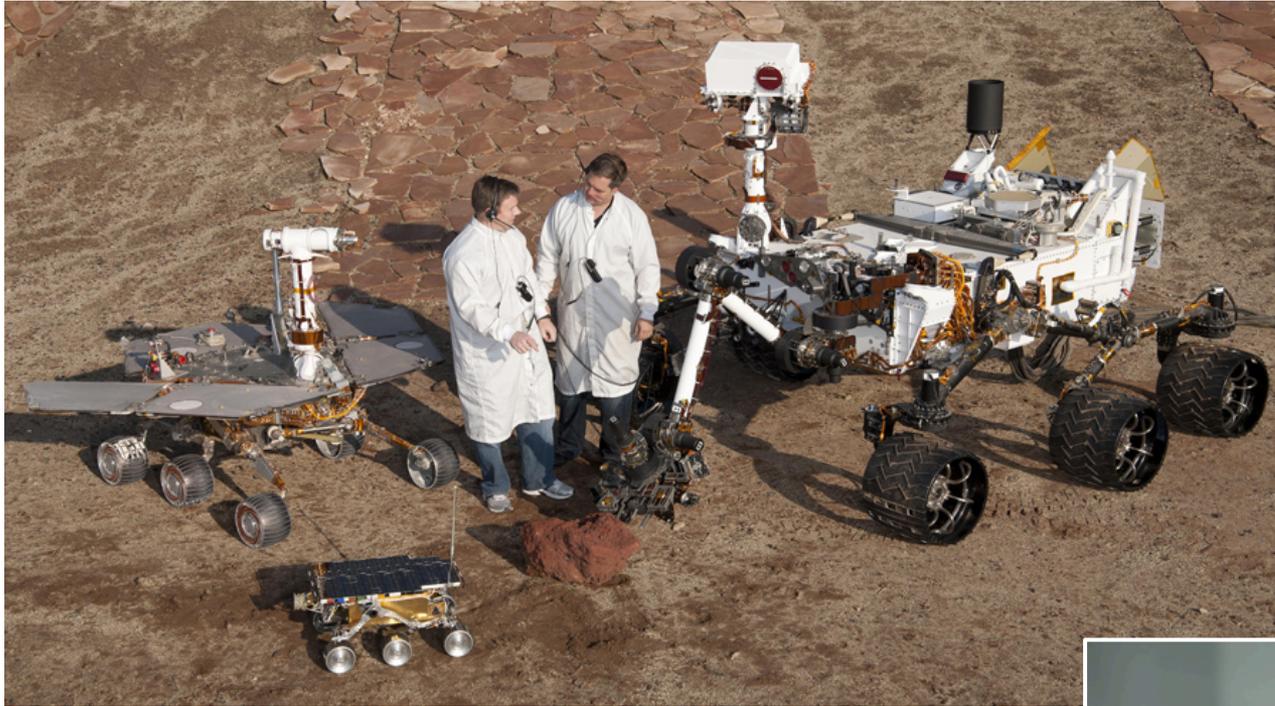


**Prior:** Controls Lead, RoboSimian:  
DARPA Robotics Challenge

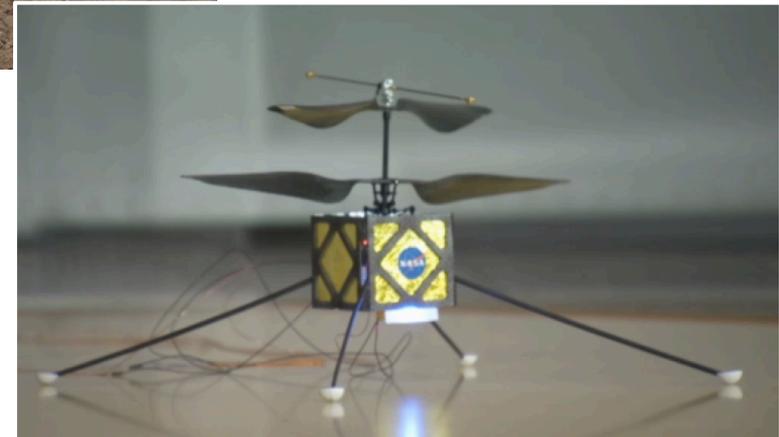


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# Mars Exploration



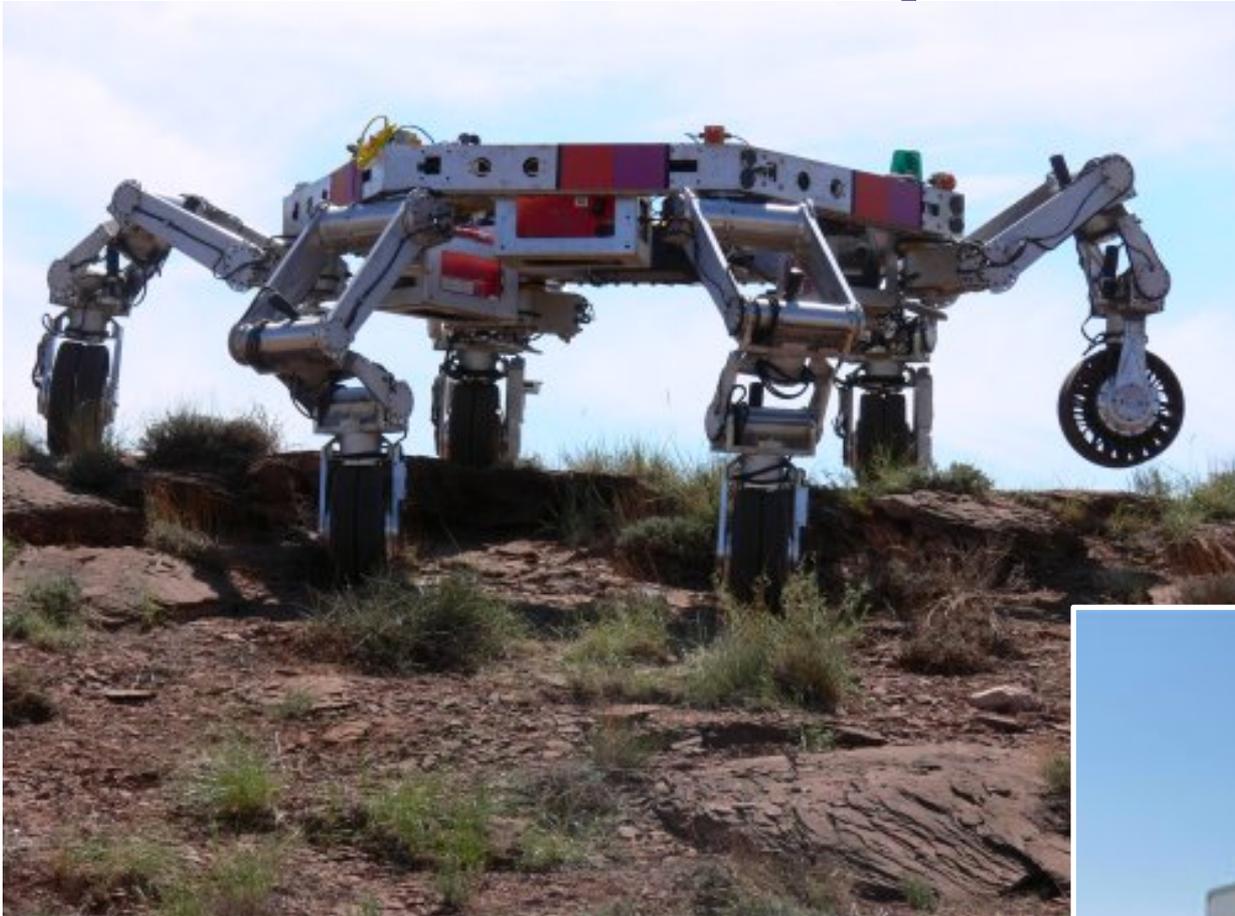
- 1997 Pathfinder
- 2003 Mars Exploration Rover
- 2012 Mars Science Lab
- 2020 Rover, potentially with helicopter



Technology demonstration model 3



# All-Terrain Hex-Limbed Extra-Terrestrial Explorer (ATHLETE)



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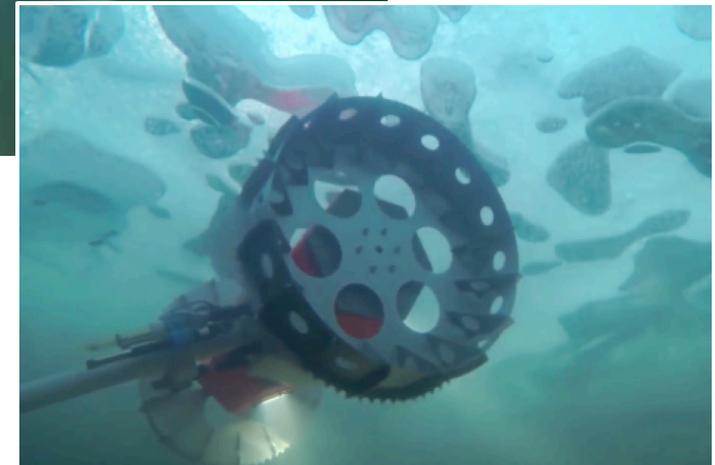
# In-Space Telescope Assembly



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Technology development demonstrating potential robotic assembly of structural modules

# Under Water Ice Rover Technology

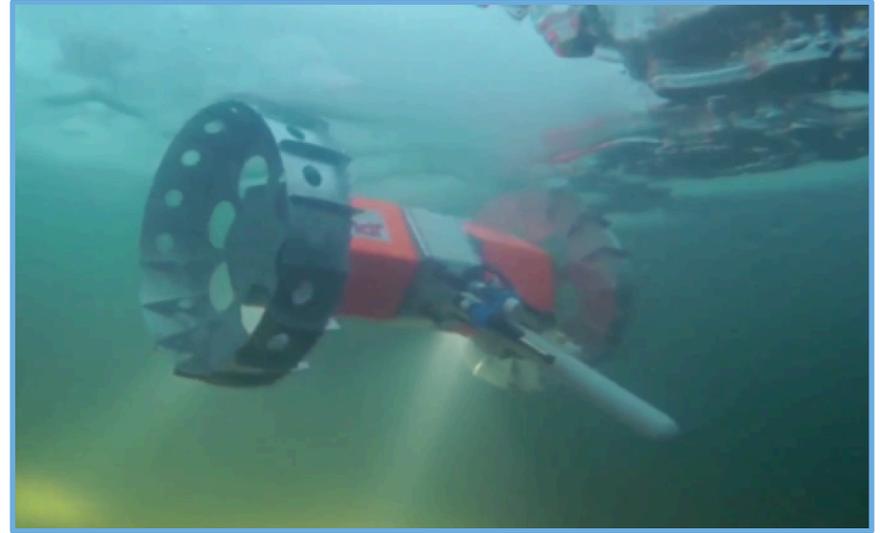
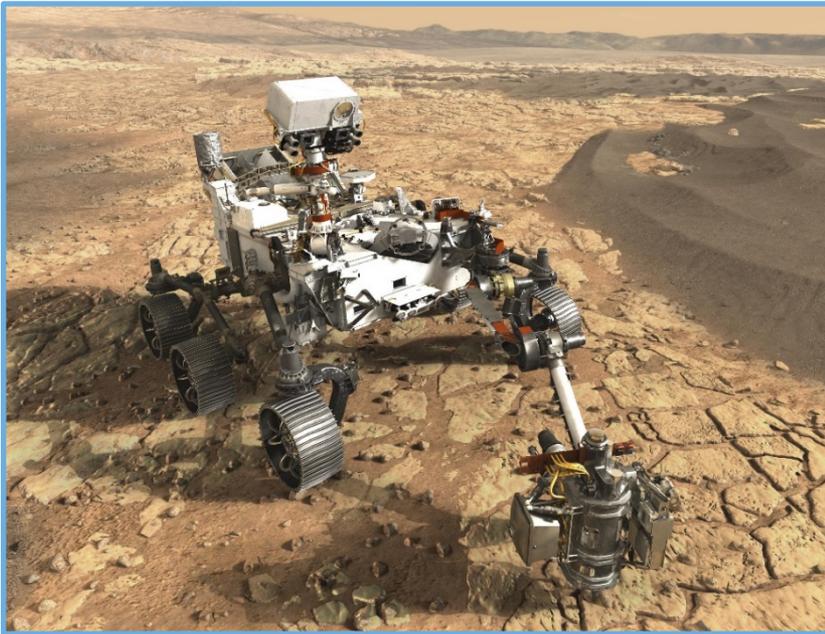


Potential exploration of ocean worlds



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# Questions?



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