

# ENVIRONMENTAL STEWARDSHIP OF NEAR-EARTH ORBIT

## Moriba Kemessia Jah, Ph.D.

### Director of Computational Astronautical Sciences and Technologies (CAST)

Oden Institute for Computational Engineering  
and Sciences, The University of Texas at Austin

### Associate Professor of Aerospace Engineering and Engineering Mechanics

Cockrell School of Engineering,  
The University of Texas at Austin

### Co-Founder and President

Moriba Jah Universal, LLC

### Co-Founder and Chief Scientist

Privateer Space Inc.

### 2022 MacArthur Fellow

"Genius Grant" Winner



This cutting-edge interdisciplinary experience challenges High School or Undergrad students to consider natural and anthropogenic satellites, and the pollution of the environment just beyond Earth's atmosphere. Dr. Moriba Kemessia Jah has raised awareness globally of the myriad problems caused by debris from satellites no longer operational but still orbiting Earth. We are grateful for his expertise and collaboration in developing an action-packed unit where students explore orbits and projectiles, prototype a satellite, understand how GPS works, and tap into the Wayfinder database of all trackable satellites.

Dr. Jah challenges students to apply Traditional Ecological Knowledge (TEK) to address the space junk problem, conceptualize international and legal frameworks, and generally become more attuned to the conditions of our extraterrestrial environment. EduChange also extends thanks to NASA's Dr. George Tselioudis of the Goddard Institute for Space Studies, and Carolyn Harris of Education and Public Outreach. We're excited to get this unit into more classrooms!

STEP  
INTO OUR  
MISSION

