Kan Yang is the Team Lead for the Instrument Design Laboratory (IDL) at Goddard Space Flight Center, one of the National Aeronautics and Space Administration (NASA)’s field centers in the United States. In this role, Kan leads teams of up to 40 engineers, scientists, instrument technologists, and university partners to conduct concurrent and collaborative design studies on instruments as diverse as large astrophysics telescopes, imagers to study planetary targets, large radio frequency antennas for Earth Science, and small astronaut-handheld instruments for the lunar surface. He works with Center and Agency-level leaders to produce concepts for NASA’s next generation of spaceflight instruments, consistent with the United States’ strategic direction and vision. He also works with Goddard’s Instrument Systems and Technology Division to select the most innovative and groundbreaking proposals for technology research funding.

Kan started his career with NASA Goddard in 2010 after receiving his Bachelor’s Degree from the University of Michigan and his Master’s Degree from the University of Maryland, both in aerospace engineering. Onboarding with NASA as a thermal engineer, he designed flight thermal control systems and developed methods to verify their operability in the intended space environment using test facilities here on Earth. Kan helped develop the Global Precipitation Measurement core observatory satellite, which launched in 2014 to improve our knowledge of precipitation systems and the changing climate. He was also the Lead Thermal Analyst for the James Webb Space Telescope (JWST)’s cryogenic vacuum test at NASA’s Johnson Space Center, helping to direct the effort to safely cool down the telescope to a chilling -240°C. For his efforts in ensuring the safety of the telescope element when Hurricane Harvey hit the Houston, TX area in 2017, and contributing to the successful launch and commissioning of JWST, which has since offered unprecedented insight into our universe, Kan was awarded the NASA Exceptional Achievement Medal.

In parallel with his technical position, he also holds the position of Vice-Chair of Goddard Space Flight Center’s Asian American, Native Hawaiian, and Pacific Islander Employee Resource Group (AANHPI ERG). Kan plans Goddard’s celebratory observances for Asian American and Pacific Islander Heritage Month. He has co-led NASA’s inaugural celebration of Nowruz as well as the first Agency-wide celebration of Diwali, and has co-planned its first celebration of Eid Al-Fitr. Each event has drawn over 300 attendees from across NASA and raised cultural awareness among the NASA workforce for underrepresented groups within the AANHPI umbrella. In addition, Kan has communicated AANHPI-specific concerns to NASA-wide senior leaders, including challenges in hiring, retention, and promotion to leadership, and has helped craft goals within NASA’s Strategic Plan for DEIA to help close the AANHPI leadership gap.

Kan has authored many technical papers, conference presentations, textbook chapters, and holds a leadership position with the International Conference on Environmental Systems. He has served as an instructor at the University of Maryland, guest lectured at Cornell University and the University of Michigan, and recorded seven short courses for the NASA Engineering and Safety Center Academy. He considers his work in science, technology, engineering, and mathematics (STEM) outreach for middle and high schools, especially for underserved communities in Hawai’i, to be one of his most impactful achievements.