KinetX Overview

KinetX Aerospace, Inc. was founded by a team of systems engineers with a vision to bring together fresh ideas and innovative approaches to designing and developing complex satellite communications architectures. From assisting Motorola in the development/implementation of the IRIDIUM satellite constellation, to navigating spacecraft on interplanetary missions today, KinetX has built extensive systems engineering experience/disciplines that can be applied to multiple industries/programs. Our core competencies are; Systems Engineering (SE), Space Navigation and Flight Dynamics (SNAFD), and Software (SW)/Hardware (HW) Engineering.

Systems Engineering

KinetX recognizes the importance of strong system engineering leadership, particularly for large complex systems that are introducing new technologies. Our staff is experienced working within challenging environments where there are constantly changing requirements, multiple teams / organizations participating, and stringent schedule and budget targets.

Space Navigation and Flight Dynamics (SNAFD)

SNAFD, KinetX’ most specialized team, has a full range of orbit dynamics experience in every phase of a space mission. SNAFD provides mission design and navigation support for NASA’s most complex space missions including the missions: New Horizons to Pluto, MESSENGER to Mercury, and OSIRIS REx a mission to an Asteroid, among others. Our proven track record is unmatched within private industry—with over 700 years of flight dynamics in earth-orbiting, sub-orbital, and deep space missions. KinetX Aerospace is currently the only non-government group to lead a deep space navigation effort with NASA.

Software Engineering

KinetX Software Engineering and Development (SED) is a dynamic organization that maintains a CMMI Level 3 Dev SW certification and is focused on providing software solutions that meet customer requirements on-time and within budget. Our expertise includes a range of software technologies enabling us to solve even the most complex technical problems.

Hardware Engineering

The KinetX Hardware team has extensive experience in space, government, and commercial systems with expertise in Wireless RF Communication Systems and Embedded Computing Systems. We provide end-to-end solutions from concept to production with processes and practices that adhere to our ISO9001/AS9100 certification. We have diversified skills in Digital, FPGA/ASIC, RF, Mechanical and Testing.
Supervisor for this Position

Dr. Bobby Williams (Director SNAFD Programs)

- Resume is attached

Job Description

Support launch preparation for a cubesat mission to the Moon. Gains exposure to and skills in industry standard processes for flight dynamics on a deep space mission.

Candidate Skills

Physics or Engineering background. Computer skills including some familiarity with Linux and Python required, with application to orbital dynamics desired. Ability to follow procedures dealing with running and analyzing results from complex software systems.

Citizenship

US citizenship required

Remote Internship

100% remote internship is o.k. and preferred. Intern must provide their own internet connection and computer terminal.

Onsite Support

Onsite support will not be required for this position, however, if there is a need for the resource to be onsite KinetX, follows standard COVID protocols for social distancing and mask requirements. These requirements will be communicated to the individual if/when needed.