

Satellite Remote Sensing Engineer

OPPORTUNITY

Ainira Industries is a privately held global engineering company that provides services across transportation, high technology, and security sectors. Our engineering capabilities ensure we deliver world-class, safe and sustainable solutions to projects around the world. The Company is currently seeking applicants for Satellite Remote Sensing Engineer for its growing Space and Defence division.

JOB DESCRIPTION

Reporting to the Program Manager Space and Defence, the Satellite Remote Sensing Engineer within the Aerospace team at Ainira will be responsible for devising/integrating innovative solutions in both technical and systems engineering, including designing programs for orbiting satellites. You will need to have had exposure to SATMAP and SATCOM systems, and have experience with Satellite Gateway Operations and various test equipment such as Signal Generators, Spectrum Analysers, and DVMs.

You will join our team to support our multinational client in an upcoming large Low Earth Orbit satellite network project providing Global Communications Coverage and Resource Mapping Services. You will monitor and document traffic analysis, recording data paths and associated equipment; monitor satellite operations support network usage and capacity; and troubleshoot satellite downlink transmittal.

Known in the industry for rapidly developing cost-effective solutions from the ground up, Ainira Industries believes in giving highly skilled engineers ownership of complex space and aerospace systems from start to finish, which offers them the satisfaction of moving from the simulation and design to hands-on working, building, testing and, ultimately, flying their creations.

You will have a deep understanding of monitoring, hardware and software configuration management, baseline change control, provisioning, incident response, maintenance, and network management support for a controlled access network. Also identify and recommend solutions for smooth continuing operation of network as capacity needs change and adjusts network configurations to ensure efficient operation.

RESPONSIBILITIES

- Must be detail-oriented and analytical, with an understanding of spacecraft subsystems, satellite communication systems, spacecraft operations and ground control systems
- Provide satellite operations technical analysis support on a spacecraft subsystem basis for satellites on RF equipment, programmable switching units, satellite uplink/downlink equipment for satellite comms
- Satellite ground station operations, training experience with satellite ground systems, missile warning/defence systems, and satellite command and control systems
- Maintain standards for satellite database access control and auditing, and develop strategies to effectively leverage and integrate new technologies into existing network infrastructure
- Conduct testing of communication equipment and systems, analyse and provide information on space segment lease cost, bandwidth requirements, and frequency management

- Troubleshoot electronic, electrical, mechanical systems, and perform system tuning activities working with engineer and vendor support organisations as necessary to remediate software/hardware issues
- Ensure satellites are functioning properly, creates command systems, remotely controls satellite activities
- Implement updates and upgrades while ensuring seamless integration with existing infrastructure
- Design and model data-links, digital radio, battle management, and command and control systems.
- Control and direct satellite activities from the ground, monitor and optimise system performance
- Work within ground stations to monitor satellites, ensure orbiting satellites are on the right path
- Create satellite command systems, track and record satellite trends, collect data from orbiting satellites
- Analyse, design, model, and simulate communications systems, subsystems, and algorithms for satellite communications networks.
- Model and simulate wide and local area networks, point-to-point systems, secure systems, signal coding and modulation schema, digital radio/communications technology and network architecture design
- TS/SCI/NV1 or equivalent Defence Security Clearance, or be able to acquire it in a short period of time

SKILLS and ABILITIES

- BSc/MSc in Electronics, Telecommunications, Aerospace Engineering or equivalent is required
- 5+ years of LAN/WAN Network Engineering and support experience installing, maintaining, configuring, and troubleshooting network equipment, and maintaining standard operating procedures
- Working knowledge and understanding of network protocols (TCP/IP, UDP/IP, ICMP, SNMP), routing, and enterprise network communication
- Capable of working with multiple cross-functional teams in all project activities for multiple concurrent projects necessary for the successful commercial launch of new products
- Experience with network traffic profile monitoring, troubleshooting, and performance measurement
- Knowledge, understanding, and experience with GIS systems and supporting cryptography devices
- Ability to collaborate in a team environment, and comfortable driving multiple initiatives at a rapid pace
- Capacity to write software code/programs (IT qualifications or hands-on expertise sought favourable)
- Outstanding communications skills a must, and desirable product development management skills

COMPENSATION

The Company offers a competitive compensation and benefits package.

APPLY

Click "Apply" below or use form in the Contact section – quote the reference number HR-SDA-0009. Only the shortlisted candidates will be contacted. Thank you for your interest.

Recruitment agencies, please note that no agency candidates will be accepted.