



If you want to work with emerging technology and next generation wireless products, **Echo Ridge** is the place to be! The dynamic culture at **Echo Ridge** offers both great challenges and great rewards. **All positions require the ability to obtain a Secret clearance**

Sr. Engineer - Position, Navigation and Timing (PNT)

Primary Duties & Responsibilities:

Design, simulate, develop, modify, enhance and implement advanced position, navigation, and timing solutions using software defined radio. Solutions will be required to be targeted for real-time execution on ARM and FPGA based platforms. The platforms are used with internal products or as part of solutions our partners develop. Work with an internal development team and with partners to implement the company's PNT solution on new platforms.

- Work directly with stakeholders to understand their mission level PNT challenges & issues and provide technical recommendations for advanced and alternative PNT systems that can transition into operational capabilities
- Develop and maintain signal processing algorithms for PNT positioning products
- Analyze customer needs and establish product objectives, specifications and technical solutions to ensure products satisfy customer requirements and deliverables
- Lead system design by identifying and recommending design and requirements needs for future enhancements
- Contribute to all aspects of the product life cycle (concept, development, integration, qualification, field experimentation, acceptance, delivery, and maintenance)
- Follow established configuration/change control processes

Experience & Training:

Bachelor's Degree in Engineering or Computer Science (Aerospace, Computer, Electrical or Systems) and 5-10+ years of experience are a minimum requirement. A Master's Degree is a strong plus.

Qualifications:

- Strong ability to design, simulate, develop, implement, and troubleshoot advanced real-time digital signal processing solutions on embedded systems platforms with ARM, DSP and FPGA processing elements.
- In depth experience with digital radio systems such as GPS/GNSS or software definable radios. *Key DSP techniques include code correlation processing, FFTs, tracking loops, Kalman filtering, inertial navigation technologies (IMUs, etc.), and precision time and frequency measurement algorithms*
- In depth knowledge of baseband radio signal processing, Spread Spectrum receiver design principles, signal processing in hardware and software
- Knowledge in GPS/GNSS technology and navigation algorithms
- Experience with ARM, FPGA, DSP, C++, RTOS, Linux development environment
- Experience with satellite systems (orbital mechanics principles, trajectory modeling, and space-based RF propagation environments) is a plus
- Experience with Matlab, Python, verification using hardware in the loop testing methodologies, and RF/hardware design and debugging is a plus

Echo Ridge LLC, (the Company), is an equal opportunity/affirmative action employer. All qualified applicants will be considered without regard to age, race, color, gender, gender identity, genetic information, sexual orientation or preference, religion, creed, national origin, citizenship, marital status, status as a parent, pregnancy, childbirth or related medical condition including lactation, veteran status, physical or mental disability, or any other legally protected basis in accordance with applicable federal, state or local law.