

Job Title:	Senior Digital Communication Engineer
Requisition #:	6460
Group:	Engineering and Technology Group
Department:	WIRELESS AND NAVIGATION
Clearance Required:	Secret
Duties:	<ul style="list-style-type: none"> • Design, simulate, test and apply digital communication and/or GPS hardware implementations using commercial and/or custom-developed software-defined radio platforms. • Employ a combination of FPGAs, embedded software and control software to implement GPS receivers and/or communication transceivers. • Analyze modulator and receiver subsystem performance using Matlab, python, or similar simulation environments. Apply prototypes to real-time system emulation, proof of concept development and development of prototype solutions. • Conduct applied research pertaining to advanced signal processing, and/or reconfigurable communication processing. Present results of work in briefings and/or technical reports to customers and colleagues.
Qualifications:	<ul style="list-style-type: none"> • B.S. degree in EE or related field is required. Advanced degree (MS / Ph.D) related to design of wireless digital communication systems / signal processing is preferred. • Minimum 5 years experience since BS degree in the prototyping of digital communication systems and/or algorithms is required. • Candidate should have completed relevant coursework in communication theory, digital signal processing. Theoretical understanding and practical experience with modern communication and digital signal processing techniques is highly desirable. • Experience implementing communication algorithms using embedded software, multithreaded programming, DSP, FPGA, ADCs/DACs and/or ASICs is desired. • Proficiency with Xilinx ISE, Matlab, Python and/or Modelsim is preferred. • Prior hand's on laboratory experience is a plus. • Analog or RF design experience is a plus. • Prior design experience using VHDL and/or C/C++ is preferred. • Strong written and verbal communication skills are necessary.

The Aerospace Corporation has provided independent technical and scientific research, development, and advisory services to national security space programs since 1960. We operate a federally funded research and development center (FFRDC) for the United States Air Force and the National Reconnaissance Office and support all national security space programs. We also apply more than 50 years of experience with space systems to projects for civil agencies like NASA and the National Oceanic and Atmospheric Administration, commercial companies, universities, and international organizations in the national interest.

From our inception, our highly skilled technical staff has focused on ensuring the success of every mission and developing the most effective and economic space-related hardware and software in the world. Our greatest asset is the technical expertise of our people. Our state-of-the-art laboratory facilities are staffed by some of the leading scientists in the world.

The Aerospace Corporation is an Equal Opportunity/Affirmative Action employer. We believe that a diverse workforce creates an environment in which unique ideas are developed and differing perspectives are valued, and that produces superior customer solutions. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of race, gender, gender identity or expression, color, religion, national origin, sexual orientation, protected veteran status, or disability status.

This opportunity is located in El Segundo.

Also, all of our regular positions require the ability to obtain a US government issued security clearance at the secret level. The interested candidates should review the following state department link to see if they are eligible for a US security clearance:

<http://www.state.gov/m/ds/clearances/c10977.htm#2>