Job Title: Digital Communications Engineer

Requisition #: 6550

Group: Engineering and Technology Group
Department: WIRELESS AND NAVIGATION

Clearance Required: Secret

Duties: DUTIES:

- Design, simulation, test and/or application of digital communication, estimation theory, channel coding and/or GPS hardware implementations.
- Application of FPGAs, embedded software and control software to implement GPS receivers and/or communication transceivers.
- Analysis of signal processing performance using Matlab, Python, or similar simulation environments.
- Prototype of cutting edge real-time systems for emulation and proof of concept.
- Research pertaining to advanced signal processing, GPS technology and/or reconfigurable communication processing.
- Document work products in briefings and/or technical reports to customers and colleagues.

## **Qualifications:**

- B.S. degree in EE or related field is required. Graduate degree related to digital signal processing, channel coding and or embedded software design is preferred.
- Two years of experience (either in the workforce or in pursuing an advanced degree) since B.S. degree in an area related to digital communication systems and/or algorithms is required.
- Experience implementing communication algorithms using embedded software, multithreaded programming, DSP, FPGA and/or ADCs/DACs is desired.
- Proficiency with any of the following: Xilinx ISE, Matlab, Python, Modelsim is preferred.
- A theoretical understanding and practical experience with modern communication and digital signal processing techniques is highly desirable.
- Prior design experience in of VHDL and 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.

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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 he 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: <a href="http://www.state.gov/m/ds/clearances/c10977.htm#2">http://www.state.gov/m/ds/clearances/c10977.htm#2</a>