

## Digital Communication Hardware Architect

Requisition #: 4448

Group: Engineering and Technology Group

Communications and Networking Division

DIGITAL COMM IMPLEMENTATION DEPT

### \*Duties: \*

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: \*

A B.S. degree in EE or related field is required. Graduate degree related to design of communication and/ or GPS signal processing hardware is preferred. Minimum of a PhD degree and/or 5 years experience since BS degree in the prototyping of digital communication systems and/or algorithms is required for a Sr. MTS. Experience implementing communication algorithms using embedded software, multi-threaded programming, DSP, FPGA, ADCs/DACs and/or ASICs is desired. Proficiency with Xilinx Foundation, Matlab, Python and/or Modelsim is preferred. Prior hands on laboratory experience is essential. A theoretical understanding and practical experience with modern communication and digital signal processing techniques is highly desirable. Analog or RF design experience is a plus. Prior design experience in of VHDL and C/C++ is preferred. Strong written and verbal communication skills are necessary