Job Title: Digital Communication Hardware Design Engineer

Requisition #: 4447

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 MS degree and/or two years of experience since BS degree in the prototyping of digital communication systems and/or algorithms is required for 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 hand's 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. US Citizenship is required.

Job Title: 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 hand's 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. US Citizenship is required.

Job Title: Summer Internship and Part-time Employment
The Aerospace Corporation is also looking for potential summer internships and part-time employment at Aerospace while attending UCLA. You must be a US citizen.

Note: For all the above, please send your resume to eechair@ee.ucla.edu. On the subject line, use Aerospace Corporation + Position.