Senior Digital Signal Processing Engineer

Position Responsibilities:
- Software implementation of complex DSP solutions into real time computing platforms in C/C++ or FPGA
- Design, simulation, and implementation of physical layer (Layer 1) signal processing for commercial wireless standards, such as GSM, UMTS, CDMA2K, and LTE, Wi-Fi, Bluetooth, and other commercial wireless protocols including custom protocols
- Document all aspects of the system from requirements & design through test procedures
- Design and implement these signal processing algorithms for small Size, Weight and Power (SWaP) embedded systems
- Travel to other G3 locations or customer sites as necessary
- May lead implementation of such a system by leading a team of engineering professionals
- May support or lead proposal efforts and new business development opportunities

Skills and Knowledge/Qualifications:
To be considered for this position, you must minimally meet the knowledge, skills, and abilities listed below:

- Excellent understanding of wireless communications systems and digital signal processing of analog and digital waveforms for transmit and receive functions including:
  - Sampling, Modulation/Demodulation, Encoding/Decoding, AGC, Digital Down conversion, Spreading/Despreading, Encryption/Decryption
- Development experience in implementing DSP modules in embedded real-time environments such as commercial DSPs, ARMs in C or C++
- Experienced in FPGA development (VHDL, Verilog), and associated synthesis + place/route tools
- Understanding of hardware/software portioning to optimize implementation for SWaP
- Matlab experience for DSP designs, data analysis and visualization
- Experience working with Software Defined Radio systems

Minimum Education and Experience:
- Bachelor's degree in Electrical Engineering or Electrical Computer Engineering
- 5+ years of related experience or an equivalent combination of education, skills, and experience
- Advanced degree preferred

Additional Desired Skills:
- Strong understanding of interfacing to related technologies such as analog/RF design, digital design, power supplies and software
- Adept in using test instruments and testing techniques
- Strong oral and written communications skills
- Ability to work independently and yet lead a small team and interact with team members to complete common goals and solutions
- Experience with software and firmware version control
- Familiarity with Linux
About G3 Technologies, Inc.

G3 Technologies, Inc. is a dynamic company providing state-of-the-art wireless technology solutions, specializing in software development, cellular technology, wireless protocols, signal processing and systems integration. We are a nimble, non-bureaucratic company characterized by technological innovation, extraordinary effort, and dedication to our customers, employees, and suppliers.

The atmosphere is fast-paced and agile, shifting rapidly to meet the pressing needs of our customers. Team mentality, excellent work ethic, initiative, innovation, and an entrepreneurial spirit are key factors to your success here.

G3 Technologies Inc. offers generous benefits, including:

- Generous and Flexible Vacation/Paid Time Off plan
- Company-paid Medical and Prescription benefits
- Company-paid Dental benefits
- Company-paid Vision benefits
- Flexible Spending health account (FSA)
- Tuition Assistance
- 401k matching
- Life Insurance
- Long-term Disability
- Gym Membership
- Employee Assistance Program (EAP)
- Additional voluntary benefits are available

We have several exciting new opportunities available at our suburban New Providence, NJ location.

We are located in New Providence, NJ (30 miles west of NYC), and within walking distance of NJ Transit's Murray Hill Train Station.

If you are interested, send your resume to nj.recruiting@g3ti.net