**Summary**

I am hoping to find a new position in the Colorado, New Mexico, Texas areas where I can utilize my current skill set as well as increase my knowledge and capabilities in other areas, whether it relates to RF communications, VLSI and electronics, software development, or something new. My ability to adapt to new programming languages, hardware, and tasks has been a great asset in my current workplace, and I look forward to pushing those abilities to new places. View my webpage to see sample works and learn more about me.

**Skills and Assets**

* Hardware / Software Experience:
* Unity 3D
* NetFPGA
* Linkway
* Packetstorm
* Cisco Switches/Routers
* Juniper Routers
* National Instruments Chassis
* Agilent Amplifiers, Signal Generators, and Analyzers
* USRP (B-series, N-series, E-series)
* CDMA2000/GSM
* Mobile/Fixed WiMAX
* Git / SVN
* Cadence
* Operating System Experience:
* Linux (Fedora, RHEL, CentOS, Ubuntu, Android)
* Windows (XP, 7)
* Programming Language Experience:
* LabVIEW
* Perl
* Python
* MATLAB
* Javascript / HTML5 / CSS
* C++
* Verilog
* C#
* Java / Android SDK
* Cleared for Secret information (2008 - present)
* Cleared for Top Secret information and granted access to Sensitive Compartmented Information based on a Single Scope Background Investigation (TS SCI SSBI) (2011 - present)

**Special Recognitions**

* **JHUAPL 2013 Inventor** *for filing patent on the Fly-Away Broadcast System v2*
* **JHUAPL 2014 QDT Technical Excellence Award** *for design and production of the Fly-Away Broadcast System v2*

**Experience**

**Electrical/Software Engineer at Johns Hopkins University Applied Physics Laboratory**

May 2007 - Present (7 years)

Main objectives included testbed design, technology analysis, and some product design. Most projects were federally contracted and lasted for short intervals of time. Some projects were for IRAD purposes in order to further understand a technology.

Main projects:

* Designed RF communication testbeds utilizing LabVIEW to test and analyze various technologies in extreme environments.
* Designed networking testbeds utilizing Perl scripts to test and analyze TCP congestion control algorithms in various RF environments.
* Assisted in the design, development, and testing of a mobile, digital television, radio, and SMS broadcast system. My main role was a LabVIEW UI engineer.
* Implement SDR capabilities and a web user interface on mobile platforms utilizing the C++/Python GNURadio library.

**Test and Validation Intern at General Motors**

May 2006 - August 2006 (4 months)

Designed a test model for upcoming Sensing and Diagnostic Modules by converting C++ scripts into a MATLAB/Simulink model while working with a team of engineers and the GM intranet.

**Education**

**The Johns Hopkins University**

Master of Science (MS), Electrical Engineering, 2009 - 2011

Grade: 4.0

Focus: RF Communications and Networking

Continued Ed: Computer Graphics, Mobile App Development in Android

**New Mexico State University**

Bachelor of Science (BS), Electrical and Electronics Engineering, 2003 - 2008

Grade: 3.9

Focus: VLSI, Electronics, Communications

* Design, build, simulate and layout a 16x16 3-transistor dynamic RAM circuit
* Design, proto-type, simulate, layout, and verify a rail-to-rail 2nd-order lowpass filter, based on the Sallen-Key filter.
* Design, proto-type, simulate, layout, and verify an 8-bit dual-slope analog-to-digital converter.

Activities and Societies: Eta Kappa Nu (HKN) Treasurer and Tutor (2007 to 2008),

The National Society of Collegiate Scholars (2005 to 2008),

The Dean’s Honors List (2004 to 2008),

Crimson Scholar (2004 to 2008),

Phi Eta Sigma (2004 to 2008)