SUBMITTED BY: Jeff Oliver, RCR, LLC., 832.258.1367

Bryan Staton

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EDUCATION

Texas A&M University, College Station, TX
Bachelors of Science, Engineering Technology - Electronics, December 2007

EXPERIENCE

Electrical Engineer, MicroTesla Houston Texas. **May, 2013 – April, 2016**

Design embedded tools for directional drilling.

- Designed and supported MWD/LWD directional tools with various sensors such as accelerometers, magnetometers and temperature being read by 24bit ADC.
- Developed the microcontroller, DsPIC, FPGA firmware that filers the signals and communicates with tool string.
- The MWD tools interface with various companies tools with protocols using RS-232, RS2-485, I2C, SPI, Q-Bus and modified CAN-bus.
- MWD tools stored information on high temperature memory over SPI and I2C with ability to dump memory topside.
- Designed and implemented an environmental board for a directional drilling string. This sensor is capable of measuring shock, vibration, and temperature to help notify drill operators of potential damaging events real time over I2C and SPI while storing all information on memory.
- Support all existing firmware for MicroTesla's MWD/LWD tools.
- Design both digital and analog circuits for electronic sensors in harsh downhole environments.
- Develop firmware and software for DSP, FPGA, and microcontrollers.
- Work on and maintain desktop software that interfaces with tools in C#, C++, Labview

Electrical Engineer, Consultant for RM Instruments, Conroe, TX **Aug, 2010-April, 2013**

Consultant services for the design and development of embedded wire-line tools for logging cased-holes.

- Hardware design and development, schematic capture and simulation for MWD/LWD tools and wire-line logging.
- Firmware for microcontrollers and DsPic for reading and controlling sensors while communicating of RS-485, RS-232
- Lab bench testing, high temperature testing and field testing
- Documenting software, hardware, and testing procedures

Electrical Engineer, RM Instruments, Bellville, TX **Dec, 2008 – Aug. 2010**

Design and develop embedded electronic tools for drilling and logging cased holes in the oil and gas industry.

- Microcontroller based telemetry for wire-line tools
- DSP signal filtering
- Digital relay control boards
- High/low voltage powers supplies
- Researching ICs, generating BOM, procuring components and populating PCBs
- Testing and board modifications
- Software development for microcontrollers and DSPs
- Heat testing tool and preparing for production

Project Manager for Senior Project, Texas A&M, College Station, TX **Aug. 2006 - Jun. 2007**

Design a microcontroller transmission control module.

- Designed and develop digital and analog circuits to interface microcontroller with transmission
- Research and obtain a working knowledge of the 4l60E transmission
- Design Labview test bench to simulate all inputs and outputs for a virtual 4L60E transmission
- As the project manager, it was my job to understand the overall project and bring all the segments together

- Keep the project on schedule and communicate with all members

*All documentation and video demos can be found at http://www.robusthaven.net

Technician, Jeremy Roach, Spring, TX **2004 - 2005**

Installation of PBX and patch equipment for telephone networks. Configuration layer 2 and 3 of Cisco networks.

Installer, Telpro Technologies, Pleasanton, CA **2001 - 2002**

Sub contracted by South Western Bell to install telecommunications equipment in central offices.

- Install ATM and TDM equipment
- Run fiber optic, coaxial, and twisted pair cable

SKILLS

- Firmware development for embedded microcontrollers, DSPs and FPGA devices
- Digital and analog circuit design and development
- Circuit capturing and simulation
- PCB layout, procuring components that meet specifications and populating board
- Bench testing, temperature testing and PCB modifications
- Documenting hardware, software and testing procedures

EXPERIENCE

- Firmware for Microchip Pic and DSPs, Atmel microcontrollers
- Digital circuits with Xilinx FPGAs
- Analog circuit and sensors; mags, accels, temp, vibe/shock.
- Communications with RS-232, RS-485, SPI, I2C
- Harsh environment component selection for MWD/LWD
- C, C++, Assembly and VHDL
- P-CAD, Altium, Orcad, Labview, Mplab, Visual Studio
- Linux, Unix, OS X, Windows operating systems and servers