Alberto Sierra Romero

Electrical/Hardware/Embedded Engineer
Dallas-Fort Worth, TX
-Email me on Indeed: http://www.indeed.com/r/Alberto-Sierra-Romero/33f23663ec7fbe9e

Master of Science in Electrical Engineering capable of solving difficult challenges while ensuring timely completion of project deadlines. Well-versed in all phases of product design, with a strong working knowledge of embedded systems, electronics, circuit analysis, digital communications and DSP.

Authorized to work in the US for any employer

Work Experience

Electrical | Embedded Engineer

Spacee - Addison, TX
May 2019 to Present

Responsible of the design and development of electronic circuits and embedded systems

• Electronic design, schematic capture and PCB design

• Embedded development with Yocto, C and RTOS

ELECTRICAL ENGINEER

WOODEN CAMERA - Dallas, TX
June 2017 to April 2019

Manage all phases of electronic products and embedded system design: from prototyping and coding through testing and release of final product:

• Embedded firmware development with C for ARM and PIC microcontrollers
• Electronic design, schematic capture and PCB design
• Support the cross-functional project team, working with mechanical engineers, product manufacturing and product management
• Provide guidance to technicians regarding assembly, flashing and troubleshooting of products

RESEARCHER

CINVESTAV - GUADALAJARA, MX
September 2014 to August 2016

Research and implementation of several projects with model based software and Hardware Description Language:
❖Implemented a radar based system for multiple target tracking for ground traffic applications which can run in real time. Built using Matlab
❖Implemented a radix-2 decimation in time FFT / IFFT in Verilog with a novel architecture reducing memory space and resource utilization
❖Prepared reports and published articles about projects

R&D ENGINEER
LACETEL - HAVANA, CU
September 2010 to June 2014

❖ Developed IP modules with Hardware Description Languages for DVB-T and DTMB digital TV standards
❖ Developed embedded firmware for Xilinx's FPGAs and Microchip's microcontrollers to monitor and control VHF-UHF telecom equipment
❖ Designed, implemented and troubleshooted electronic circuitry for RF power amplifiers

Education

MSEE
CINVESTAV Guadalajara
September 2014 to August 2016

BSEE in Telecommunications and Electronics
Technological University of Havana
September 2005 to July 2010

Skills

- Matlab (3 years)
- prototyping (6 years)
- testing (5 years)
- Verilog (1 year)
- C (4 years)
- C++ (3 years)
- Electronics (9 years)
- Electrical Engineering
- Fpga
- Electrical Design
- PCB
- VHDL (2 years)
- Embedded systems (5 years)
- Firmware
- ARM
- Software Development
- Agile

Links

https://www.linkedin.com/alsierraromero

Publications

Vehicle detection with occlusion handling, tracking and OC-SVM classification: A high performance vision-based system
January 2018

Implementation and performance analysis of a radix-2 decimation in time FFT-IFFT. Oct 2015. SOMI XXX,
October 2015

Implementation of channel coding and mapping of a DVB-T modulator.
March 2013

Additional Information

SKILLS
C/C++, Verilog, VHDL, MATLAB
Code Composer Studio, MPLAB, PICC, Quartus, ISE, OrCAD, EAGLE
Prototyping, debugging, troubleshooting, testing
Experience operating oscilloscopes, spectrum analyzers, logic analyzers, signal generators, multimeters