# James Martinez

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### SKILLED ELECTRICAL ENGINEER

Skilled, Top-Producing Electrical Engineer with over 7 years experience providing programming and circuit analysis. Project examples include PID and embedded control system design for a 4 rotor UAV using an accelerometer and gyro for input, satellite mapping using ArcGis including designing university building models with CAD software, an embedded system with the use of an ultrasonic distance sensor to display distance on an lcd screen. Embedded Linux / Android system design using Buildroot and Yocto for use in beverage dispensers. Built waveguide antennas for 2.4ghz operation on wifi networks. Member of The Institute of Electrical and Electronics Engineers (IEEE).

#### Technical Proficiencies:

- Matlab, Scilab
- Git and SVN
- Altium, Eagle, PADS
- NI Labview, Multisim
- Raspberry PI, Arduino

- LPKF pcb and cnc router /mill
- Embedded Linux, FreeRTOS
- Solidworks,NX , Spaceclaim
- Rapid prototyping
- Analog circuit design

- C, C++, Python
- Verilog , VHDL
- Assembly ARM, PIC , AVR
- Dev-C++, Visual Studio ,Qt
- Keil MDK ARM, GNU ARM

## PROFESSIONAL EXPERIENCE

### Network & Security Specialist, Work Study - UTSA

2009 to 2010

✓ Wireshark, Metasploit, OllyDbg, and IDA Pro

### **Electronics Design Engineer II – Lancer Corporation** Present

2011 to

- ✓ Instrumentation, power supply, and analog circuit design
- ✓ SMT assembly, test fixture design, and environmental stress testing
- ✓ CISPR 32, CISPR 14-1, CISPR 14-2, conducted , radiated, and immunity product conformity and testing
- ✓ UL, ETL, CSA, IEC, and FCC product conformity and testing
- ✓ Linux, Android, bare metal µCU , and Windows software and firmware development

✓ Printed circuit board design, wire harness design, and associated documentation

### PROFESSIONAL DEVELOPMENT

Associate of Science in Electrical and Electronics Engineering Technology – Awarded Spring 2007 Palo Alto College San Antonio, TX

Bachelor of Science in Electrical Engineering – Awarded Spring 2011

The University of Texas as San Antonio San Antonio, TX

Master of Science in Electrical Engineering – Started Spring 2014

The University of Texas as San Antonio San Antonio, TX