

CHRIS SCHWAB

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Electronics Technician

SUMMARY

Electronics Technician experienced in component level troubleshooting, C programming (National Instruments LabWindows and Altera firmware programming), hardware jitter analysis, USB testing, 1394 fire wire testing and test writing, PCB layout design, and the maintenance and troubleshooting of multi-million dollar testers used in production testing of integrated circuits. Formal education has been in electronics, computer programming, and computer architecture, including a Bachelor's of Science in Computer Information Systems and an Associates degree in Electronics Engineering Technology.

Key area of expertise is:

- **Hardware analysis and troubleshooting**

TECHNICAL and ENGINEERING SKILLS

- Use of Logic analyzers, oscilloscopes, pattern generators, parameter analyzers, etc.
- National Instruments' LabWindows and LabView
- C, C++, Pascal, Assembly (Motorola, Intel)
- Windows
- MS Word, Excel, Access, PowerPoint
- OrCAD schematic capture and PCB layout

EXPERIENCE

Adecco Staffing, Fort Collins CO

October 2012-July 2014

2014

Test Technician

Assignment was at Advanced Energy in Fort Collins CO. AE assembles 500KW, 333KW, and 250KW solar inverters used to convert solar power from photovoltaic panels to AC power to power the electrical grid. Job required testing of the completed units and some troubleshooting if there were problems.

Fidelity ComTech, Longmont CO

January 2011-October 2011

2011

Electronics Technician

Did assembly and testing of smart antenna systems with some troubleshooting down to board level. Also did assembly of cables and board modifications.

AeroTek Staffing Agency, Loveland CO

August 2009-November 2010

2009-2010

Engineering Technician, Production Technician

Worked an assignment at HEI Inc in Boulder helping to troubleshoot a medical device for cancer down to component level. At Hach Co in Loveland troubleshoot their line of samplers and flowmeters. At Advanced Energy the main focus was supporting AE's line of programmable DC, RF, and pulsing power supplies. Did environmental testing including temperature and vibration.

Adecco Employment Services September 2006-March 2009
Engineering Technician and Reliability Technician 2006-2009

At Advanced Energy worked on their line of programmable DC products. Component level troubleshooting on power supply boards, logic boards, etc... Testing and measurements of new replacement parts. Worked for Reliability group, also worked for DC Engineering group. Main focus was supporting AE's line of programmable DC, RF, and pulsing power supplies. Environmental testing including temperature and vibration.

Benchmark Electronics, Loveland, Colorado September 2005-September 2006
SYSTEMS TEST TECHNICIAN 2005-2006

Worked a second shift assembling and testing IC testers for Agilent

Sigma Instruments, Fort Collins, Colorado April 2005-September 2005
FIRMWARE PROGRAMMER 2005

Implemented C based software on a PC board with an Altera FPGA – the board was used in the control and monitoring of the deposition of various materials. Parsed and implemented a variety of commands used in the control and monitoring of such coating materials as copper and quartz.

LSI Logic, Fort Collins, Colorado **1983-November 2004**
PRODUCT APPLICATIONS ENGINEER, ENGINEERING TECHNICIAN, LAB TECHNICIAN, and TEST MAINTENANCE TECHNICIAN

Responsible for programming C based testing and Integrated Circuit testing and verification.

- Developer of a National Instrument's LabWindows project used for testing LSI Logic's USB chips. This system included the use of a logic analyzer, PC, narb generator, and test fixture board. The LabWindows software not only did analysis, but also controlled the logic analyzer across the network, started the patterns transmitted out the narb generator, and adjusted to different setups

Troubleshoot board problems and performed Integrated Circuit testing and verification

- Worked on Sony playstation chip, one of the biggest revenue makers for LSI. The group's assignment was to test and verify the operation of the 1394 firewire serial interface.
 - Troubleshoot such problems as IC lockup
 - A major contributor in writing C programs to test the Sony chip
 - In charge of parameter analysis and PCB board layout.

Responsible for lab and equipment maintenance. Developed prototype boards used for testing.

- Managed a lab for the Communications group where developed a desktop pattern generator

Dealt with the fast paced and high pressure environment of a semiconductor production test floor:

- Calibrated, maintained, and troubleshoot multi-million dollar IC production testers, IC handlers, and wafer probers; many times troubleshooting down to component level

EDUCATION

❖ **BACHELOR OF SCIENCE DEGREE IN COMPUTER INFORMATION SYSTEMS, August 2005**

Regis University, Denver, Colorado

Emphasis: Computer programming, computer architecture, Systems design, and databases. 3.88 GPA – Magna Cum Laude

❖ **ASSOCIATES DEGREE IN ELECTRONICS ENGINEERING TECHNOLOGY – Toledo University Community and Technical College**

Emphasis: Analog and digital electronics. 3.83 GPA (first in class)