

RICHARD GONZALES

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CAREER OBJECTIVE

Design digital and analog electronic systems to maximize signal integrity, minimize EMC issues, and ensure compliance to industry environmental and safety standards.

TRAINING/ SKILLS

Signal integrity	Crosstalk	FCC Part 15 and Part 68
Impedance control	EMC debug & testing	CISPR
Differential signaling	ESD testing	UL1950 (60950)
Power supply noise	Thermal testing	NEBS (GR63/1089)
Multi-layer PCB technology	System troubleshooting	

Gigahertz Transverse Electromagnetic Mode (GTEM) Cell with TILE software
Filtering oscillators, clocks and power supplies
Bypassing and decoupling capacitors
Grounding methods

WORK EXPERIENCE

System Design/Compliance Engineer

Carrier Access Corporation (2001-2002)

- Lead engineer in the development of high speed digital systems including printed circuit boards (PCB) resulting in reduced emissions and less build revisions.
- Created test plans and methodologies to streamline the schedule, decreasing test time and man-hours.
- Analyzed components for frequency response, impedance, inductance, capacitance, etc. to determine utilization of less expensive parts or second source vendors.
- Developed and implemented corrective action and failure analysis plans.
- Initiated a Data Test Client Program and consolidation of products with Underwriters Laboratory (UL) resulting in an annual savings of \$25,000 per year due to less man hours, reduction of travel expenses and less audits.
- Developed and enhanced internal equipment using current probe, near field and simulated OATS site measurements in order to reduce out of company expenditures.
- Worked in a team environment to understand the implementation of the product to provide design guidelines to the lead engineers.

Compliance Engineer

XEL Communications, Inc. (1994-2001)

- Designed schematic and PCB layouts for signal integrity and to minimize emissions.
- Successfully guided several products from design and test to certification.
- Developed expertise in use of internal equipment to troubleshoot new and existing products in order to reduce the number of costly revisions.
- Managed the operation of the compliance lab, established test procedures, submitted test reports and trained other employees.
- Established collaborative protocol with 3rd party test labs such as TUV, UL, METLABS, and others for quotes and certification processes.
- Developed and implemented written protocols for testing.

Electronic Technician

Snap-On Tools (1993 to 1994)

Responsible for troubleshooting automotive diagnostic equipment.

Senior Electronic Technician

GE Automated Systems (1988 to 1992)

Tested subsystems that used microprocessors to detect motion by way of sound, vibration, and infrared light.

Assistant Manager

Southland Corporation (1985-1988)

Submarine Sonar Technician (STS1/SS-E6)

United States Navy (1979 to 1985)

Security Clearance: SECRET

EDUCATION

Bachelor of Science Electronic Engineering Technology

Metropolitan State College, Denver, CO

Emphasis: Communications

Studies in Electronic Engineering Technology

Northeastern University, Boston, MA

AFFILIATION

IEEE Society

Rocky Mountain EMC Society