

Robert D. Richards

Summary: Forward thinking problem solver with excellent written, oral, and interpersonal communication skills. Lifetime learner who applies extensive experience to provide new solutions to laboratory processes. Works well in a team setting, providing expertise while utilizing co-worker's input whenever possible.

Professional Experience

SQUARE D

Knightdale, North Carolina

2003 to present

Electronics/EMC Technician

Contract/Temporary position. Perform EMC testing to various EMC standards, including IEC 61000 series. Perform radiated immunity chamber calibrations. Perform conducted immunity calibrations. Perform ESD, Surge, and EFT tests. Configure software for testing, including CHASE, Quantum Change Tile!, and Haefley WinFEAT&R.

UNDERWRITERS LABORATORIES

Research Triangle Park, North Carolina

1996 to 2002

Engineering Associate/Engineering Technician/Senior Laboratory Technician

Performed EMC testing to various EMC standards, including FCC Part 15, 22, and 24, CISPR 11, 14, and 22. Performed radiated and conducted emissions, EFT and surge, power frequency harmonics, flicker and ESD tests. Wrote software to automate conducted and radiated susceptibility tests including automotive triplate, direct-injection, bulk-current injection and magnetic immunity tests to IEC, SAE, GM, and Ford specifications. Demonstrated lab's ability to perform these tests during 1999 and 2000 AEMCLAP audits. Developed and documented test methods including photos, schematics and diagrams. Constructed test fixtures or configured test loads as needed. Won a department award in 2001 for work done updating software, and consulting on equipment purchases and test methods.

EMC INTERNATIONAL

Youngsville, North Carolina

1995 to 1996

EMC Technician

Responsible for testing to FCC and European EMC directives. Performed radiated and conducted emissions, and radiated, transient, surge and static discharge susceptibility testing. Established IEC 1000-4-3, 16-point uniform field in a new Universal Shielding semi-anechoic chamber. Set up and maintained the Quantum Change TILE program used for running IEC 801-3 and 1000-4-3 RF immunity.

BURROUGHS WELLCOME WRL AUTOMATION GROUP, RDM COMPUTING

Research Triangle Park, North Carolina

1988 to 1995

Automation Specialist III/Automation Technician III

Serviced data acquisition systems including connection to various lab instruments. Designed and constructed custom electronic circuits (digital and analog) for special interface projects. Programmed and integrated Zymark laboratory robots. Won two BW Excellence awards for work done automating laboratory tasks.

Additional Experience

DRAMEN COMPUTERS, *Raleigh North Carolina*, Service Manager, 1987 to 1988. Set up and repaired PC, XT, and AT compatible systems. Scheduled the set-up and installation of PCs and networks. Maintained parts stock. Wrote software and implemented test and burn-in procedures for newly assembled PCs.

INFORMATION PROCESSING CONSULTANTS, *Raleigh North Carolina*, Field Engineer, 1984 to 1987. Repaired and serviced computers and word-processing systems down to board and component level. Taught classes to customer support and field engineering departments on MS DOS and PC network configurations.

CENTURY DATA SYSTEMS, *Raleigh North Carolina*, Electronic Technician, 1982 to 1984. Performed component level repair of printed circuit boards, including TTL, CMOS, PMOS and linear circuits.

COMM SOUTH, *Wilson, North Carolina*, Electronic Technician, 1981 to 1982. Installed video and sound systems in churches and schools. Installed satellite receivers. Repaired Sony ¾ inch Umatic VCRs used in small television studios.

Certification

National Association of Radio and Telecommunications Engineers, certified EMC Technician with Accredited Test Lab endorsement.

Education

WILSON TECHNICAL COMMUNITY COLLEGE, *Wilson, North Carolina*
Electronic Servicing, Industrial Analog and Digital Electronics, 1981
4.0 GPA, Dean's List, President's Award

Additional Training

National Instruments Labview, Basic and Advanced, 1997 • Introduction to Visual Basic, 1994
Zymark System Productivity Software, 1993 • Zymark Understanding Pyotechnology Programs, 1993
C Programming Language I, II III, IV, 1989 • NBI System One School (first in class with score of 98), 1986
NBI Integrated Control Unit School (first in class with score of 98.6; first ever to get 100% in diagnosis lab), 1985
NBI Basic Workstation and Printer School (first in class with score of 98), 1984

Professional Development

2000 IEEE International EMC Symposium
Agilent Back to Basics Seminar, Spectrum and Network Analyzers 1999
Mode-Stirred Chambers Conference, 1999
NEBS Compliance Meeting, 1998
Kimmel and Gerke Designing for EMC, 1998
International Symposium on Laboratory Automation and Robotics, 1994
International Symposium on Laboratory Automation and Robotics, 1993
International Symposium on Laboratory Automation and Robotics, 1992