RESUME

Michael D. Havener 29730 St. Andrews Court Murrieta, CA 92563 (909) 677-0753 (305) 422-5749 fax mhavener@ni.net

Position: Software Developer

Plant Equipment, Inc. / Temecula, California

www.peinc.com

Date: February 1996 to Present

Duties: Write and maintain software applications used in Public Safety / Emergency 911 phone centers. The company's client / server products are designed for a Windows NTTM network. The company's hardware modules take advantage of Windows CETM. Visual Basic and Visual C++ are used for development, with extensive use of MFC, ATL, STL, XML, COM, and ODBC. Object Oriented Analysis and Design are used throughout the development process. Plant Equipment is a Microsoft Solution Provider.

Position: Engineering Assistant

Beckman Instruments, Inc. / Brea, California

Diagnostic Development Center

www.beckman.com

Date: May 1989 to February 1996:

Duties: Assigned to the Hardware Development Department. Worked with Electrical, Mechanical, Software, and Chemical Engineers in the development and integration of Biomedical Instrumentation systems. Extensive work in motion control systems, hardware / software interface. Wrote the motion control test algorithms. Worked with the integration team to solve system issues (hardware, software, and chemistry interfaces).

Position: Lead Engineering Technician

Jet Propulsion Laboratory / Pasadena, California Electronics Parts Reliability (Section 514)

Radiation Effects Group

www.jpl.nasa.gov

Date: April 1985 to May 1989

Duties: Design and fabrication of electronic circuits to characterize electronic devices for use onboard unmanned spacecraft. Running of those same tests and compiling the data. Fabricated the hardware and wrote the motion control software for robotic equipment used in positioning of electronic devices in the radiation environment. Promoted to Lead position in May, 1986. Responsible for maintaining Lab readiness, assignment of tasks, and assure the quality of equipment and data coming out of the Lab.

Position: Lead Wireman

Everett Charles Test Equipment / Pomona, California

Date: February 1984 to April 1985

Duties: Act in the place of the Supervisor during the Supervisor's absence. Build and troubleshoot prototype and production equipment from blueprints and schematics. Supervise, assign tasks, and provide technical knowledge for 13 people. Insure the smooth flow of jobs and equipment through my area.

Position: Electronics Technician

Wholesale Cash Register / Fullerton, California

Date: August 1983 to February 1984

Duties: Troubleshoot electronic cash registers down to the component level in the field, as well as in the maintenance facility.

Position: Radio Repairman

United States Marine Corps / Washington DC

Date: June 1979 to June 1983

Duties: Provide preventive and corrective maintenance to various types of radio equipment, ranging from High Frequency (HF) to Ultra High Frequency (UHF), multi-channel duplexing equipment, cryptographic equipment, and some limited microwave. Held Platoon Sergeant billet, as well as being Head of Quality Assurance and Shop Chief prior to that position. Received the Good Conduct Medal and a Meritorious Mast for my actions. I commanded up to 45 men in the field, as well as in garrison. Held Secret Security Clearance.

Position: Engineering Test Technician

Irvin Industries, Inc. / Gardena, California

www.irvin.co.uk

Date: June 1978 to September 1978

Duties: Set up and ran equipment used in gathering test data, including oscillographs, transducers, accelerometers, and slow motion movie cameras used in mechanical and high bay impact testing.

Education: C++ Programming Certificate - University of California, Riverside Extension

Hardware Engineering Course - Jet Propulsion Laboratory.

Design of Experiments

Digital Signal Processing

Military Schools to include: Basic Electronics Course, Fundamentals of Digital Logic, Radio Fundamentals Course, Ground Radio Repair Course, and Limited Cryptographic

Maintenance.

Graduated from Nathaniel Narbonne High School, Harbor City, CA.

Skills: Motion Control Systems (servo & stepper)

C++, C, Visual Basic, Basic & FORTRAN Programming

Computer Networking NASA Certified Soldering

NASA Certified Electro-Static Damage Safety

Machine Shop Welding Wire Wrap Cable Splicing

High Vacuum Systems

Equipment/Machinery Experience:

Servo Systems Multi-Channel Analyzer

Stepper Motors & Controllers Logic Analyzer

Micro Volt Meter Data Acquisition Modules

Pulse Generators Oscillograph
Current Probe Lazers

Curve Tracer Photomultiplier Tubes

Spectrum Analyzer Detectors

RF Signal Generator Infrared Detectors
Signal Generator Oscilloscopes
Frequency Counter Pico Ammeter

Hobbies: Sailplanes, 1-26 Association Webmaster (www.serve.com/126ASSN), Lake Elsinore

Soaring Club Webmaster (www.capistrano.com/lesc), Ham Radio (www.qsl.net/ke6fjt),

Electric Vehicles, photography, woodworking.

References available upon request.