

# RESUME

## VERNON JOHNSON

Vernon Johnson is an accomplished and well educated engineering professional with more than 20 years experience working with leading edge computer technology.

Vernon successfully completed the MCSE certification (Microsoft Certified Systems Engineer) in June of 2006.

Vernon's responsibilities include hardware, firmware, and software design.

## SPECIALITIES

### Operating Systems

MS-DOS  
Windows 3.1 / 95 / 98 / 2000 / 2003, Windows XP, XP Embedded, Vista, CE  
Red Hat Linux / Debian Linux / Ubuntu Linux

### CAD Software

Protel  
MathCAD  
MicroCAP (SPICE)  
AutoCAD  
SolidWorks  
PCBX

### Project Management

SAP R3  
Microsoft Project

### Programming

MicroChip – 16F, 18F, PICC18, MCC18  
Atmel AVR / Codevision AVR  
TI MSP430, Code Composer  
Motorola / Freescale 68HC08 / Codewarrior Assy and C  
Intel x86 Assembler  
Turbo Pascal  
Embedded BIOS  
C / C++  
Visual Studio.NET  
ASP.NET  
MS SQL  
XML

### Industrial Software Tools

GE Logicmaster  
Allen Bradley SLC 500  
Keyence KV Ladder Builder  
Yamaha Robotics VIP

### Regulatory Compliance

UL, CSA, CE, NEC, CFR, MIL-STD

## E-M Designs - EE Group

- PO Box 7807
- Dana Point, CA 92624
- E-Mail = [infoee@emdesigns.com](mailto:infoee@emdesigns.com)

- PH 650.728.3406
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- [www.emdesigns.com](http://www.emdesigns.com)
- [www.gerhardeng.com](http://www.gerhardeng.com)
- [www.emmanufacturing.com](http://www.emmanufacturing.com)

## EDUCATION

Recent education includes advanced database and n-tier application design using Visual Studio.NET 2003.

Certifications Completed: Electronic Technology - QS9000 - FMEA - A+ - MCSA – MCDBA – MCSE

MARIC COLLEGE, Lake Forest, California 2004 - 2005

- Computer Networking Professional (GPA 4.0 – Perfect Attendance)

SADDLEBACK COLLEGE, Mission Viejo, California December 1989

- Electronic Technology Electronic Engineering and Computer Science coursework exceeds graduate degree level requirements.

## PROFESSIONAL EXPERIENCE

### 2005 to Present

***E-M Designs, Inc.*** Dana Point, CA  
Staff Engineer - Hardware and Software design

- Automated Burn In System – Hardware and Firmware Design (Atmel Mega16 MCU)
- Mobile Wireless Access Point – Motorized Antenna / Stepper Motor – Hardware and Firmware Design (Microchip MCU)
- Computerized Beverage Vending Machine (Atmel Mega 16 MCU) and Host Software application software(Windows CE)
- Emergency Vehicle Siren System Motorola (68HC908 MCU)

### 2001-2003

***Fluidmaster, Inc.*** San Juan Capistrano, CA  
Manufacturing Engineer - Project Management and Design Engineering of Automated Manufacturing Machinery

- Accomplished Laser date code marking of tested products. Estimated Savings exceed \$10 Million over 5 years in reduced product liability exposure.
- Reduced Labor Cost for Connector Hose cutting process, by introducing new and revised automated machinery.
- Completed a Custom PC Based Barcode Audit System. Eliminating packaging errors and costly Contract Penalties. Resulting in improved Customer Relationship.

### 1989-2001

***Horiba Instruments, Inc.*** Irvine, California  
Project Engineer – Automotive and Stationary Source Emission Gas Analytical Systems

- Managed many projects in the \$250K to \$3M range. Delivering Custom Emissions Testing Equipment. Collaborating with Customers on detailed custom specifications.
- Completed several unfinished and problematic projects initiated by others.
- Trained Customers and Service Technicians in operation and maintenance.
- Supervised a project team to create and bring a sophisticated new emissions analyzer to market.
- Supervised numerous installation projects throughout the continental United States.
- Support of service department in control system software and engineering historical data management.

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**1986-1989**

***Automotive Performance Electronics***

Dana Point, California

*Sole Proprietor* – Design/Manufacture/Marketing of Electronic Automotive Specialty products

- Designed, patented, manufactured, and marketed the “Micro-Dyno” Air/Fuel ratio meter (an analog instrumentation amplification and display device).
- Designed, manufactured, and marketed the “Boostpak” Electronic Turbocharger management system (a high speed analog closed loop pressure and accessory control device).
- Designed and deployed several custom electronic projects for automobile racing teams, including a land speed record setting team.

**1983-1986**

***DC Johnson and Associates***

Lake Forest, California

*Application Engineer* – Custom Automotive Emission Control Systems

- Collaborated with Customers and Suppliers to design Emission Control Systems for European Automobiles, for successful compliance with US emission regulations.
- Trained Customers and Field Service Technicians in system installation and inspection.
- Supervised and Trained Inside Service Department Personnel.

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