

Timothy D. Mc Carthy-Smith

Electrical Engineer and Systems Engineering

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Objective

To obtain a technical position which will utilize my skills, experience, education and further develop my engineering talents.

Summary of Skills

- System level architecture and design of electro-mechanical optical systems for aircraft and terrestrial use
- Analog & mixed signal circuit design and PCB layout
- Wire harness and transmission line design for analog and high speed digital data
- Continuous and non-continuous rotational joint design for power, signal and digital data
- RF & fiber optic test equipment manufacturing
- Control system design for heating and cooling systems
- Manufacturing support of new designs and design change
- Test and troubleshoot system and subsystem level defects to root cause
- HALT, ALT, ESS, EMI/EMC, MIL-STD-704 test plan development and implementation
- Work with vendors for test equipment rent/purchase, materials and component design and selection
- Successfully communicated with a diverse audience of technical and non-technical contributors; promoted teamwork and acted as a consultant to others offering guidance and training

Additional Skills and Knowledge

- Software applications & languages: AutoCAD, Solidworks w/ PDMWorks source safe, Altium Protel, Orcad & Pspice, Perforce source safe, Trilogy Design Parts&Vendors Database, Manugistics MTO ERP, MatLab/Simulink, MathCAD, C, Intel and Motorola Assembler, LabView, and Microsoft Office suite including Visio & MS Access
- Standards: IPC 610/620, Multiple Mil-Stds, NEC 2002/2005, ISO 9000/9001, UL
- Co-author of Patent (pending) for non-continuous rotational joint for high speed digital data
- Formerly held Secret level security clearance
- Experience in cross-cultural environments & can communicate in Japanese and American Sign Language

Employment History

- L-3 Communications Sonoma EO (formerly Sonoma Design Group) – Santa Rosa, CA
Electronic Engineer in Research & Development 2004 – 2008
- Alternative Energy Inc – Windsor, CA
Solar System Design Engineer 2003- 2004
- Advanced Fiber Communications – Petaluma, CA
Electrical Engineering Internship June - August 2002
- Hewlett-Packard / Agilent Technologies – Santa Rosa, CA
Engineering Support Technician 1996 - 2001
- Power Up Products
Electronics Technician 1995 - 1996
- United States Navy - Honorable Discharge
Electronics Technician and Work Center Supervisor 1988 - 1994

Education

- Engineer in Training (EIT) Certification #117310
Board for Professional Engineers and Land Surveyors July 2003
- Bachelor of Science Degree in Electrical Engineering
California State University Chico, California May 2003
- AS Degree and 2-year vocational certificate in Electronics Technology
Santa Rosa Junior College, Santa Rosa, California June 1996
- Certificate from Electronics Technical "A" School
Naval Training Center, Waukegan, Illinois October 1990