David S. Coote

Contact: http://davidsrm.coote.us/

OBJECTIVE

To apply my combined Electrical Engineering experience and recent education in Computer Science towards a meaningful and challenging position.

SUMMARY OF QUALIFICATIONS

- Coordinated the design, fabrication and on site installation of the electrical controls for two attractions at Universal Studios Japan.
- Led the development team for a family of precision ultra-low temperature (-90ºC) laboratory baths.
- Designed and supported manufacturing in the timely shipment of four OEM process temperature control systems for the Semiconductor Industry.
- Directed the development of a microprocessor based building automation system from prototype to production.

PROFESSIONAL EXPERIENCE

SABBATICAL LEAVE / EDUCATION April 2001 to present
Traveled the world visiting more than 30 countries on 5 continents. Enrolled in a graduate program in Computer Science focusing on Automation Systems. Currently active in projects involving Real-Time Systems and Graph Data Structures. Designed three websites.

SHOW TECHNOLOGIES, INC. Sun Valley, CA. January 1999 to April 2001
Electrical Engineer. Directed the electrical design and fabrication of special effects for automated theme park ride and show systems at Universal Studios Japan.
Performed various design and management duties including:
- Managed Japanese installation team of 10 individuals
- Set company electrical workmanship practices and standards
- Managed sub-contractors
- Coordinated facility interfaces
- Implemented large scale control systems architectures (DCS, SCADA)
- Designed control enclosures (mechanical and electrical)
- Developed motion control systems (Anitech, Allen Bradley)
- Programmed PLC's (RSLogix – SLC 500, PLC-5)
- Qualified and designed Emergency Stop (E-STOP) and other life safety systems
- Designs hydraulics, pneumatics, steam, lighting and vision systems

AVIZA TECHNOLOGY (formerly ASML). Scotts Valley, CA. November 1997 to July 1998
Electrical Engineer, temporary contract. Performed failure analysis and design changes to wafer processing equipment (Vertical Thermal Processors) for the Semiconductor Industry. Gained experience with:
- Semiconductor Fabrication
- 200mm and 300mm Rapid Vertical Processor (RVP/AVP) Design (Very High Temperature Furnace Design)
- Atmospheric Pressure Chemical Vapor Deposition (APCVD) Design
- Robotics
- Unix
- VME Bus
- Field Programmable Array Logic (Xlinx)
- Gas, Position and Temperature controls

THERMO ELECTRON, INC. Newington, NH. November 1995 to October 1997

Electrical Engineer (Neslab Instruments Division). Facilitated the electrical design of fluid temperature control apparatus for semiconductor fabrication and scientific laboratory environments.

DESIGN RESPONSIBILITIES:
- Control strategy and wiring
- Sensor/transducer utilization
- Software specification (embedded products)
- PLC ladder logic (Allen Bradley)
- Power distribution
- Compliance to standards (UL, CE, NFPA)

PROJECT LEAD RESPONSIBILITIES:
- Team management
- Financial status reporting
- Time line for product development
- Failure Mode Effectivity and Criticality Analysis (FMECA)
- Departmental Training, 30-60 Engineers

AET SYSTEMS, INC. Norwell, MA. September 1993 to November 1995

Production Engineer. Directed the production of digital controllers for HVAC applications.
Specific duties include:
- Drafting specifications for new product development
- Testing of incoming printed circuit boards
- Performing board level ECOs for improved performance and manufacturability
- Monitoring and controlling product quality

Electronic Technician, Co-op I & II. January 1993 to August 1993
Assisted in various aspects of manufacturing and R&D, including:
- Prototype debugging of mixed signal printed circuit boards
- Testing and repairing embedded microprocessor control systems
- Electro/mechanical assembly of wiring enclosures

COMPUTER SKILLS

PROGRAMMING LANGUAGES: Java; C; C++; Web Design - HTML, XML, CSS, java script

APPLICATIONS: AUTOCAD, PADS PCB, ORCAD, Microsoft Word/Excel/Power Point, Time Line, National Instruments LabView

OPERATING SYSTEMS: Windows 3.X/95/98/NT/2000/XP, DOS, UNIX

EDUCATION

UNIVERSITY OF MASSACHUSETTS BOSTON, Boston, MA
Candidate for MS in Computer Science.
Completed core BS in Computer Science Degree Courses, 20 credits, 2003.

CALIFORNIA STATE UNIVERSITY FULLERTON, Fullerton, CA
"Fundamentals of C++", 3.0 CEUs, 1998.

WENTWORTH INSTITUTE OF TECHNOLOGY, Boston, MA
BS in Electrical Engineering, 1994.
AS in Electronic Engineering Technology, 1990
Electives focused on control systems.

SPECIAL QUALIFICATIONS AND INTERESTS

Dual citizenship with the United States and the European Union.
Willingness to travel or relocate.
Personal Interests: International Travel, Marathon Running and Mountaineering.