

Michael Coote

<http://michaelcoote.com>

Objective

To apply my energy markets knowledge, controls system design experience and system programming skills in the transforming energy industry.

Summary of Qualifications

- Transitioned from analyst to associate to manager in three years at a Fortune 500 energy company.
- Successfully led the electrical controls design, build and install on six fast paced infrastructure projects sticking to the multimillion dollar budget.
- Managed a foreign based installation team of ten for nine months in Japan.

Professional Experience

Constellation Energy. Boston, MA. July 2006 to present

Load Forecasting Manager. Managed databases and models for the purposes of forecasting energy consumption. The forecasts are fundamental to managing short term and long term electric energy supply market positions.

Essential Duties include:

- Built and maintained relational databases for the purpose of storing historical and forecasted data.
- Created statistical models (linear regression analysis) for load forecasting and analysis.
- Lead projects (SQL/SSRS/ASP .net) resulting in design solutions and quality control mechanisms to improve forecast accuracy.
- Advised on pre-deal risk: Variable load risk (VLR Analysis), shaping risk, capacity risk, transmission risk, deviation charges and UFE charges.
- Took ownership of the Mid-Atlantic, New York/New Jersey and New England forecasts and acted proactively about keeping upper management informed of position risk.
- Collaborated with operational and regional leaders on the design and maintenance of IT infrastructure systems.
- Advised and mentored colleagues and interns on forecasting-related issues.

General Electric. Watertown, MA. March 2004 to June 2006

Electrical Engineer. Designed electrical control systems for high volume water purification equipment, including; high purity systems for research facilities and process water for industry. Specific duties include:

- Hardware and system architecture design
- Facility integration and on-site support
- Programming (PLC, HMI, SCADA)
- System validation

Sabbatical Leave / Education April 2001 to March 2004

Traveled the world visiting over 30 countries on 5 continents, including; a 130 mile trek across the Nepalese Himalayas and an overland traverse of Tibet. Participated in graduate research in Computer Science focusing on creating a Java Graph Data Structures API ([JDSL](#)).

Show Technologies, Inc. Sun Valley, CA. January 1999 to April 2001

Electrical Engineer. Directed the electrical design, fabrication and installation of special effects for automated theme park ride and show systems at Universal Studios Japan. Performed various design and management duties including:

- Managed ten person Japanese installation team
- Managed manufacturing sub-contractors
- Set company electrical workmanship standards
- Implemented large scale control systems architectures (DCS, SCADA)
- Programmed PLC's (RSLogix – SLC 500, PLC-5)
- Qualified and designed life safety systems

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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
- Atmospheric pressure chemical vapor deposition
- Robotics, Unix, FPGA programming
- Very high temperature furnace 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. Duties include:

- Control strategy and wiring
- Software specification (embedded products)
- PLC ladder logic (Allen Bradley)
- Power distribution
- Compliance to standards (UL, CE, NFPA)
- 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: SQL Server; My SQL; VB; Java; C; C++; Web Design - HTML, XML, CSS, java script
applications: AUTOCAD, PADS PCB, ORCAD, Microsoft Word/Excel/Access/Power Point, Time Line, National Instruments LabView
operating systems: Windows / UNIX

Education

University of Massachusetts Boston, Boston, MA

Graduate project in Graph Data Structures.

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, Cycling and Mountaineering.