

Michael J. Coote

<http://michaelcoote.com/>

KEY 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 and meeting deadlines.
- Managed a foreign based installation team of ten for a year in Japan.

TECHNICAL SKILLS

Languages: R; Python; SQL Server; My SQL; VB; Java; C; C++; Web Design - HTML, XML, CSS, java script

Applications: Microsoft Word, Excel, Access, Power Point, Project; Matlab; AUTOCAD; PADS PCB; ORCAD; National Instruments LabView

Operating Systems: Windows, UNIX, Linux

PROFESSIONAL EXPERIENCE

Power Advocate. Boston, MA, Energy Data Manager. (November 2015 to February 2016)

Coordinated data analysis tasks for a SaaS supply chain reporting product aimed at energy utility companies. Specifically: Utilized Python (scikit-learn), R, MySQL and MS Access for cleaning and exploring large data sets with the goal of implementing a machine learning approach to automate data schematization / classification, working in an Agile development environment.

Constellation Energy (Exelon). Boston, MA, Load Forecasting Manager. (July 2006 to October 2012, April 2014 to June 2015)

Managed databases and statistical models for the purposes of forecasting retail energy consumption and portfolio risk management.

- Built and maintained relational databases to store historical and forecasted data
- Created models (linear regression analysis) for load forecasting and quantitative risk analysis
- Managed IT projects (SQL/SSRS/ASP .net)
- Controlled pre-deal pricing 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 proactively kept upper management informed of position risk
- Advised and mentored colleagues and interns on forecasting-related issues

General Electric. Watertown, MA, Electrical Engineer. (March 2004 to June 2006)

Designed electrical control systems for high volume water purification equipment, including; high purity systems for research facilities and process water for industry.

- Architected and designed controls systems
- Designed motor control centers
- Programmed PLC, HMI and SCADA systems
- Coordinated facility integration, equipment installation and site commissioning

Show Technologies, Inc. Sun Valley, CA, Electrical Engineer. (January 1999 to April 2001)

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.

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

Aviza Technology (ASML). Scotts Valley, CA, Electrical Engineer. (November 1997 to July 1998)
Performed failure analysis and design changes to chemical vapor deposition wafer processing equipment (Vertical Thermal Processors) for the Semiconductor Industry. Designs were UNIX and FPGA based high temperature furnace controls with robotics.

Thermo Electron, Inc. (Neslab Instruments Division). Newington, NH, Electrical Engineer. (November 1995 to October 1997)

Facilitated the electrical design of fluid temperature control apparatus for semiconductor fabrication and scientific laboratory research.

- Architected the control strategy
- Wrote specifications for embedded products
- Coded PLC ladder logic (Allen Bradley)
- Designed power distribution systems
- Assured compliance with industry standards (UL, CE, NFPA)
- Performed Failure Mode Effectivity and Criticality Analysis (FMECA)
- Trained engineering staff, 30-60 Engineers

AET Systems, Inc. Norwell, MA, Production Engineer. (September 1993 to November 1995)

Directed the production of digital controllers for HVAC applications, including; drafting specifications, testing printed circuit boards, implementing engineering changes and taking ownership of quality control.

Electronic Technician, Co-op I & II. (January 1993 to August 1993)

Assisted in various aspects of manufacturing and R&D, including; prototyping of mixed signal embedded microprocessor control systems.

Sabbatical. (April 2001 to March 2004, November 2012 to March 2014)

Traveled the world visiting over 55 countries on 5 continents, including; supporting glacier research through the [American Climber Science Program](#) and [Black Ice Himalaya](#) attaining 7, 5,500 m+, summits in the Cordillera Blanca of Peru and the Nepalese Himalaya; 300 miles trekked 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](#)).

EDUCATION

Johns Hopkins University, Coursera

Data Science Specialization, 5/10 courses complete, certificate candidate 2016

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.

SPECIAL QUALIFICATIONS AND INTERESTS

Dual citizenship with the United States and the European Union.

Personal Interests: International Travel, Cycling and Mountaineering.