Developer Developer Brenham, TX Implement systems to improve operational efficiency in energy trading markets. Authorized to work in the US for any employer Work Experience Developer Direct Energy - Houston, TX January 2008 to Present Houston, TX) January 2008 - Present    Endur Trade Interface development and scheduling of trade processing on the grid. This process was not running effectively in March 2018. We evaluated the situation, found JVS, SQL, and DDL changes to improve the process so we can accurately process 300,000+ messages daily.  Endur Market Data Interface development and support of grid processing. This process required JVS, SQL, and DDL changes.    Developed MarketPro web site to allow both customers and internal advisors operating on behalf of customers to see market information, updated pricing, settlements information, and trade execution. In addition to making existing business more efficient the web site opened new business opportunities.    Supported nMarket in CAISO, MISO, NEPOOL, NYISO, PJM and Texas. This support involved installing and moving database and application services to different servers; applying vendor patches; adding new participants; adding new users; configuring scheduler jobs; and helping users.    Developed plant scheduling tools in C#/.Net. This project involved developing the code to schedule generation assets in ERCOT through nMarket. The system calculated balance energy bids and generation schedules in the ERCOT zonal market.    Developed ISO scheduling system in C#/.Net. This project involved developing tools to schedule load forecast in Day Ahead market for CAISO, ERCOT, MISO, NEPOOL, NYISO, and PJM through nMarket.    Developed ISO Settlement reports from nMarket databases.    Developed systems to smoothly transition into the ERCOT nodal market.    Developed a google earth tool to display ERCOT nodal pricing. Developed processes to create ETRM trades from ISO Day Ahead Market awards.    Developed Excel spreadsheet interface to nMarket NY to support plant scheduling.    Developed C#/.Net system to schedule bilateral trades in nMarket for CAISO, MISO, NEPOOL, NYISO, PJM and Texas. Developer Ventyx - Houston, TX December 2004 to December 2007    Developed ISO scheduling system in C#/.Net using WPF. This project involved developing detail activity plan based on Functional Specs in Microsoft Project. Developing a Unit Test plan for each activity. Developing the data access layer, business layer, services and WPF required. Unit testing the activity and

updating the project plan.    Developed VB6 Plug-In modules for K2 Energy Trading risk management tool. This project involved developing the code from technical specifications created by an analyst and working with the analyst to ensure the code tested successfully and matched the requirement.    Developed and implemented C#/.Net using XML Web Service interfaces for ISO scheduling systems. This project involved analyzing the requirements based on meetings with the user; developing a functional spec; developing the code; testing the interface; and traveling to the user site to install the system for final signoff.    Developed VB6 Gas Storage optimization models. This project involved analyzing the requirements based on meetings with Product Management personnel; developing a technical spec; developing the code; testing the code; and demonstrating the code. Contract Software Developer 1993 to December 2007 Developer Eskimoo Inc - Houston, TX June 2004 to January 2005   Performed database architecture design and modifications. This project involved using Visio to design relationships between SQL Server tables; building the tables in SQL Server; and maintaining the Visio document and SQL Server tables.    Developed reports, views and stored procedures for Energy Trading Information Management System. This project involved using Enterprise Manager to develop SQL Server Stored procedures and views. Re-wrote TIMS system in C#/.Net. This project involved converting VB6 code and converting it to VB.Net; then converting the VB.Net code to C#.Net. Developer Eskimoo Inc - College Station, TX July 2004 to November 2004 Developed web pages to support Transportation Research. This project involved working closely with users to create detail design document for Web Pages. Implementing the web pages in PHP, XML and XSL with MY SQL database. Testing the web pages and demonstrating the web pages for user sign off. Consistently developed pages exceeding customer expectations. Developer Linde - Bryan, TX April 2003 to February 2004    Installed MAS500 ERP package to support Accounts Receivable and Accounts Payable functions on time and under budget. This project involved adding custom VB6 plugins, Crystal Reports, and IIS web site using ASP/JavaScript/VBScript web pages to perform required tasks based on oral specifications from meetings with users. Then testing the individual plugins and finally testing the entire system.    Developed file routing program to automate manual EDI Process allowing TMG to

gain new business. This project involved creating VB6 and ASP/JavaScript/VBScript custom processes to improve tasks based on observations of business process. Then testing the process and implementing it.    Knowledge Based Systems (College Station, TX) July 2000 - November 2002

Developed closed loop simulator for dynamic resource planning as next generation MRP system. This project involved developing Database model using IDEF modeling tool based on meetings with engineers; building the Oracle database from code generated by the tool; building a Microsoft Project plan for the coding activities; building the VB6 interface program for the Oracle database; building IIS web site using ASP/JavaScript/VBScript web pages for reporting; testing the system; updating the project plan; and documenting test results.    Converted Borland/Delphi C++ IDEF modeling tool to Visual C++. Supported MANMAN Hughes Network Systems - Germantown, MD January 2000 to June 2000 system on HP3000. This project involved working with Change Requests sent in by users; documenting the discrepancy or enhancement; developing Cobol or COGNOS code necessary to implement request; testing the solution; demonstrating the solution to the users; and implementing the change. Supported MANMAN Y2K FMC - Tupelo, MS 1999 to December 1999 testing. This project involved developing a detailed test plan to ensure there would be no Y2K issues; executing the test plan; and documenting the test results. Since there were no issues, there was no need for follow up. Developer Compaq - Houston, TX October 1993 to November 1999   Developed procedures for reconciling different databases saving $3 million a year in write-offs. These projects involved detailed analysis of data in Oracle/SQL Server and Image using SQL tools and SuprTool; drawing conclusions about the causes of the anomalies; presenting the results to the appropriate people in management; and correcting the VB6/Oracle and/or Fortran/Image systems. Setting up an IIS web site using ASP/JavaScript/VBScript web pages to display the nightly results of reports for management to verify procedures are working correctly. This project involved communication both oral and through email with management frequently.

Developed scheduling system to enable Compaq to ship a record number of computers. This project involved developing functional specs based on interviews with subject matter experts; developing technical specs from the functional specs; developing FORTRAN code to work with MANMAN

databases; testing the integrated product; and implementing it. This project involved constant interaction with users and technical staff. Developer Compaq - Brenham, TX March 1998 to October 1998 Revived late and over budget Oracle HR/Payroll system implementation. This saved Blue Bell hundreds of thousands of dollars. This project involved working closely with users at various levels and from various disciplines within the organization to determine the exact settings and customizations required to the Oracle package; developing the appropriate Oracle Forms, Procedures and Oracle Reports to implement solution; test the solution separately and with users; document test results; and present test results to users. Developer Compaq - Miami, FL August 1996 to August 1997 Revived late and over budget implementation of the Collier-Jackson Circulation System. This saved millions of dollars for Knight Ridder. This project involved working with functional specs to develop technical specs; developing COBOL code; testing the system; and documenting the test results. This project required daily communication with users. Developer Compaq - Baytown, TX February 1996 to August 1996 Developed a vacation tracking system quickly and cheaply. This project involved developing COGNOS code based on interactions with other people on the technical staff; communication with users in other areas through email and telephone; testing the system; demonstrating the completed system to users; and putting the system into production. Owner/ Developer MultiMedia Realities - Webster, TX October 1992 to August 1993 Developed the first multimedia patient satisfaction survey that runs on a standalone kiosk for MacGregor Medical Center saving Prudential HMO hundreds of thousands of dollars a year. This project involved creating a proposal with a demo of the concept; upon acceptance, creating function specs; creating the MacroMedia solution; installing the solution in 20+ locations throughout Houston; and monitoring the results and locations periodically. Owner/ Developer Houston Applied Logic - Webster, TX November 1989 to May 1993 Developed a HyperCard based document automation system called ALSED for the NASA Life Sciences Project Division. This project involved weekly meetings with Life Science personnel; documenting the meetings; developing functional specs; developing HyperCard and C programs on Macintosh; testing the system; documenting the test results; demonstrating the system to a conference of users from around the world; and delivering the

system to the users. Partner 1989 to 1993 Analyst Rockwell Space Operations Company - Webster, TX November 1988 to January 1991 Responsible for the BET generation. This project involved leading a team of four engineers in running FORTRAN programs; documenting results; tuning UNIX to improve performance; delivering results within one week of mission completion; and presenting results to user meetings. Team Lead 1984 to 1991 Analyst TRW - Webster, TX July 1984 to November 1988 Developed and maintained the BET production software. This project involved development of FORTRAN and C language routines to run in a UNIX environment to track Space Shuttle ascent and descent flight phases. Education Master in Computer Science Texas A&M University December 2003 Bachelor of Science in Mathematics in Mathematics/Computer Science Loyola University - New Orleans, LA May 1984 Skills .Net. (10+ years), C# (10+ years), databases. (10+ years), Fortran (10+ years), Visual Basic (10+ years), HTML, Javascript, XML Links http://yahoo.com Certifications/Licenses Driver's License Additional Information   Over 30 years of experience in all aspects of software development.   Over 10 years of experience in energy market systems   On-going knowledge updates and trainings including a Master degree in Computer Science received in December 2003.   Strong communication skills both written and oral. Extensive breadth of technology experience.   Technical Skills:   Programming: ABAP, Ada, ASP, C, C++, C#, COBOL, EDI, FORTRAN, Java, Jscript, .NET, Pascal, PHP, PL/SQL, Visual Basic, VB Script, XML, WCF     Operating Systems: Windows, UNIX, VMS, MPE     Databases: Access, MySQL, Oracle, SQL Server, IMAGE     Applications: Visual Studio, Oracle, Forms, Reports, MAS500, SAP, COGNOS, Visual Interdev, Crystal Reports, Borland/Delphi, nMarket, Tibco, Allegro, Endur

Name: Robert Cooper

Email: mooresusan@example.com

Phone: 7789954691