

Mukul Patel

Control Engineer - Johnson Controls Inc, (Contract)

Audubon, PA - Email me on Indeed: indeed.com/r/Mukul-Patel/afc954a6fe018049

Willing to relocate: Anywhere

Authorized to work in the US for any employer

WORK EXPERIENCE

Control Project Engineer

Johnson Controls Inc, - King of Prussia, PA - February 2015 to Present

Collaborated with engineering experience and expertise, served with a spirit of creativity, allows BMS to offer a full range of integrated services in North America, Europe and Australia. Designing individual, tailored solutions makes BMS (Building Maintenance System) risk and capital management. Provide GlaxoSmithKline (GSK) Pharmaceutical client for their Worldwide Real Estate (WREF) Facility maintenance and capital project technical support. Failure protection system for test jigs of membrane and chemical dispense for strategic analytical problem solving. Facilitated the customer reporting, change controls for GMP and GXP and audit applications redesign through SOA architecture that affected production process as well as reduce downtime and maintenance effort. emphasis Electro-mechanical automation system for medical device equipments, exclusive Allen Bradley PLC programming, electro mechanical transducers, mechanical equipment and test jigs, indexer, high speed camera measurement system etc.

- Supervised and worked on statistic process control of GMP facility, Equipment and controls coordinate with R & D engineers, technicians and management.
- Involved in system test plans design review and approvals, validation for GMP report and equipment upgrading. Interact with fabrication shops, PLC-5 and SLC-500 and 5000, MRB and vendors.
- Supported application engineering team to decide the successful proposal strategy, and basic process engineering, bids for in coordination with purchasing managers, quote request.
- Managed and motivated project-engineering team for execution of projects and site staff at job sites
- Provided system integration of PLC based controls, RSLogix 500, RSLogix 5000, and Control network, sensors, actuator, control logics.
- Managed to operated and maintained HVAC and Chiller for failsafe production. Performed periodic maintenance and test protocols, facility chiller, hot air and water boiler Custom Utility Process (CUP), Compressor and Cooling agents circulating fans and pumps.
- Optical 3-D, camera/image processing systems, neural networks and ultrasound devices uncover cracks, scratches, cavities, distortion and dimensional variances, paving the way for zero-defect production.
- Accomplished 25% net improvement in functional efficiency within 6 months through proficient design reviews and analytical test and maintenance plans.

Project coordinator

BROOKVILLE EQUIPMENT CO - Brookville, PA - August 2014 to Present

Worked on technical proposals for mass transit vehicle fleet. Communicate with various Departments, heads and stake holders regarding customers requirements and deliverables. I have done analysis from historical data from contracting v/s building in house and Business development including scoping, WBS elements, Resources, quality and, investigation and validation process development. Change request and documentation. Staying long hours to complete the task on time. Risk mitigation, trouble shooting and providing corrective suggestions.

- Directly led engineers, electricians and test technicians to improve testing efficiency through efficient validation testing. Achieved validation within budgeted time.
- Worked with various validation and acceptance tests, such as wire insulation, continuity, fuel economy, engine performance, and structural finite analysis. Utilized crawl spaces, ladders, and scaffolding to access equipment.
- Prepared technical proposals including overhaul of light rail cars in rebuilding the Factory Acceptance Training (FAT) and maintenance program.
- Proposed (SOP) methods and instrumentation and controls, testing and diagnostics tools and techniques for HVAC, Cooling and thermal heat exchanger for quality and validation testing.

Propulsion Engineer

ALSTOM Transportation - Naperville, IL - June 2013 to March 2014

Worked on rebuilding and validation technical proposal for mass transit vehicle fleet. Using research information online web portals. Communicate with various department heads and stake holders regarding customers requirements, including billing, procuring, tools and techniques for quality and resources inventory, investigation and process development.

- Prepared technical proposals including overhaul of light rail cars in rebuilding the Factory Acceptance Training (FAT) and maintenance program.
- Proposed methods and procedures for static and dynamic testing and troubleshooting
- Developed technical proposal for San Francisco Municipal Transportation Authority (SFMTA) light rail fleet capital equipment overhaul within 3 months for \$23M+ budget including cost, procurement, risk management, and deliverable action plans

Project / Test Engineer

Electro-Motive Diesels - LaGrange, IL, US - April 2004 to March 2013

Preparing and executing (CSV) Computer system validation test plans. Resources estimate, schedule planning, Using network router switches, web base digital data transmission and research information online web portals. Change request and documentation. Communicate with various department heads and stake holders regarding test execution on budgeted time and in critical time frame, risk mitigation, trouble shooting and providing corrective suggestions. Staying long hours to complete the task on time.

- Prepared and applied Instrumentation & controls for testing Diesel and Natural Gas operated locomotive. Applied mass air and fuel flow sensors, compressed pressure, temperatures to PLC and Data logger for test cell test HMI and remote data and test monitoring, Collected Real time data, analyze test data and generated test report spreadsheet.
- Prepared and delivered instrumentation and test jigs for remote testing location including, piping, fittings, high pressure tubing, thermocouples, air flow sensors.
- Mass air flow meter, clean air canister filter and chiller cooler.
- Position ensure compliance with NFPA, NEC, ASTM and USDA, FRA and other applicable requirements
- Visited remote facilities, conducted reviews and monitored testing and results through remote networking and other data acquisition devices.
- Achieved 10% improvement in time and cost within 3 months by preparing test setup and establishing new methods for testing protocols.

Facility Maintenance Engineer

General Register - Exton, PA - March 2002 to September 2003

On production line Hi-tech Newspaper printing press motor, mechanical, process controls, Fire screen program and interfacing with equipment supplier.

- Responsibilities include maintenance and checking processes & coordinating with vendors for Detailed engineering, troubleshooting, monitoring of paper transportation system for
- Involved in system test plans and interact with vendors for HVAC, AC/DC inverter drives, PLC controls.
- Very effective transparent communication between associates and management personal and very clear understanding of principles, company strategy and methodology.
- Performed peak hours news paper production support for optimum production and reducing down time.
- Hands on HVAC and Chiller controls monitoring and maintenance by HMI and SCADA for ambient climate control to protect news paper WEB line.

EARLIER CARRER:

Service Engineer, ALSTOM Transportation Corp, Washington, DC
Project/Service Engineer, Maxwell Dynamometers Inc, Exton, PA

EDUCATION

Bachelor in Electrical Engineering

M S University - Vadodara, Gujarat
June 1977

ADDITIONAL INFORMATION

Seasoned project engineer offering extensive experience and expertise from various industries. Possess outstanding skills in resource management, system integration & testing, end result oriented dependable team player, excellent trouble shooting and applying optimum effort for satisfying customer, project management and cross-functional and excellent communication. Perform above and beyond to support the team and clients.

SKILLS AND QUALIFICATIONS:

- PLC: PLC Programming, variable frequency drive, Siemens (S5), EM-2000, hardware (including I/O, Ethernet, and data transmission communication networks)
- BAS: Building Automation System, Energy Efficiency, Power Monitoring and Control system.
- Controls and data loggers: proficiency with Yokogawa, Fluke, Allen Bradley.
- HMI/SCADA- RTU: Human interface controls and monitoring, analysis, acquisition, network, (RTU)Remote terminal usage and data transmission, Routers, switches TCP/IP, DCS, SMTP, Modbus, Control Network.
- NERC/CIP: North American Electric Reliability/ Critical Infrastructure Protection
- Remote access solutions: RIO(Remote I/O), VPN, Remote Web Workplace
- System and Data Security: IDS/IPS, AV, HTTPS, SFTP and other file transfers
- ABB: Bailey PLC Controls, variable frequency drive, Hardware (including Ethernet, and Communication)
- Air flow: HVAC, Manometer, Mass Air flow meter and Canister vacuum pump.
- Regulatory code: Good understanding and familiarity of NEC, OSHA, FDA, FRA and Six sigma.
- Operating Systems: MAC, SUN OS, Windows [...]
- Software applications: MS Office Suite (Word, Excel, Access, Outlook, Power point and AutoCAD Path)
- Programming: C, Pascal, Basic, PLC Programmable logic controls, Visual Basic
- Database: PL-SQL 2000 and Oracle (DBA)