

Jay Wolf

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Professional Summary

I seek employment in a hands-on position working in a team or can take direction.

I am capable and responsible able to mentor or supervise with a multitude of field experiences. I don't mind travelling, meeting new people and thrive on new projects and modifications or working overtime to achieve targeted goals.

Roles and Responsibilities (pertaining to Electrical and Instrument & Control applications)

Startup Testing Engineer, Project Management and Oversight, Estimating, Design & Drafting Engineer, Electrical EMI mitigation, I&C - Instrument and Control Design, Supervisor, Modification Feasibility and Implementation, Fabrication Engineering, Material Selection and Oversight, R&D, Training, Instructor, Procedure Writing, Review and Validation, Scheduling Compliance, PM - Preventative Maintenance, Contractor Oversight and Performance Evaluation. Right down to hands on wiring harness fabrication and testing.

Field History - Work Environments: My field experience in multiple environments drives and guides producible and reliable designs to be proud of. These include

Mining, Oil & Gas wellhead to refining, Petrochem, Power Generation & Distribution, Pulp & Paper, Fiberglass, Pharmaceutical, Aerospace, Waste Water.
(Detailed specifics and timeframe upon request.)

Specific Equipment Experience: The types of equipment I've had to specify, design, purchase, substitute: Analyzers, Automation, Communication, Control Panels,

Distribution Centers, Fire protection, HMI, HVAC, Instrumentation, Motors & Motor Control Centers, PLC's - Programmable Logic Controllers, Safety, SCADA, Security, Solar Power, Substations, Wireless.

With brand names like Allen-Bradley, Cutler-Hammer, GE, Gould, Siemens, Honeywell, ITT, Westinghouse and a few others.

Software Tools: Agile, AutoCAD (release 9 to current version) Computer Vision, CADDs III & IV, CAD/CAM, D-Base, SPI IN-Tools, Micro Station, MS Office (Word, Excel, Access, PowerPoint), EDMS.

Work Experience

Principal Electrical Designer

Worley-Englewood, CO
September 2022 to February 2025

Responsibilities in electrical and instrumentation designs for refineries, a mirrored power plant and a CO2 injection facility in CA, a lithium battery recycling plant, pipeline, mining and petrochemical projects, 2024 Capital Outage Suncor Commerce City, CO. Installations of conduit, tray, one-lines, schematics, wiring, details. AutoCad and 3D, BIM, Navisworks

Electrical Designer

Hyde Engineering Services-Boulder, CO

April 2022 to July 2022

Responsibilities include electrical designs of large and small renewable energy installations including solar, EV charging stations, UPS, generator and backup batteries. Low voltage AC and DC power and, installation, one-lines, grounding, wiring and various diagrams, elevations, plans and details. Using AutoCad with

Electrical Designer

CHS Refinery-McPherson, KS

July 2020 to February 2022

Responsibilities include Electrical Designs of, low & medium voltage power and control systems, installation, one-lines, motors and drives, schematics, wiring and various diagrams, elevations, plans, details, cathodic protection, rectifier containment. Cathodic protection, upgraded Plant Compressor Control Panels and VFD

Cabinets. Miscellaneous small projects for plant upgrades. Group B, C & D

Hazardous Environments.

Electrical Designer

Worley Energy Chemicals Resources-Englewood, CO

March 2020 to May 2020

Responsibilities included: Team design checker and mentor master's degree student intern. Checked and adjusted electrical system designs for refinery upgrade to

IFC. Low and medium voltage one-lines, controls, motor controls and drives, schematics, wiring diagrams, plans, tray, details. Integrating vendor skid-mounted process equipment to PDC, Power Distribution and Control building, Instrument Air and Generator buildings. Class I Hazardous environment.

E I & C Designer

Portland General Electric-Portland, OR

March 2019 to November 2019

Responsibilities included: Mentor junior designers and interns. Create new electrical installation designs, one-lines, schematics, wiring diagrams, control for low and medium voltage generation equipment, plans and details. Corrected multiple controls designs / drawings for existing installations.

E I & C Designer

Ford, Bacon, & Davis LLC Corporation-Morrisville, NC

July 2018 to December 2018

Responsibilities included: Train / Mentor two junior design drafters. Create

Electrical, Instrumentation and Controls designs for Pulp and Paper plants.

Develop one-lines for medium and low voltage substation and switchgear, schematics, wiring diagrams, PLC / DCS, P&ID's, conduit/cable schedules, plans and details.

Senior E I & C Designer

Anvil Corporation-Billings, MT

February 2016 to May 2017

Develop Electrical one-lines, schematics, wiring details and plan drawings for Up and Midstream production sites. Designs for UPS/Battery/Generator back-up power installations for operating systems. Created a remote-control panel to relocate operator from Arc Flash. Protective relaying for 15kV and 5kV, 480V substations.

Miscellaneous small projects for plant upgrades.

Senior EI & C Designer

Freezer Integration Consulting-Denver, CO
November 2014 to August 2015

Developed Electrical, Instrumentation and Controls for refinery improvements and upgrades.

Projects included 2400 VAC for replacing old cooling tower pumps, 480 VAC and low voltage control system for a caustic system, miscellaneous P&ID's, update Instrument Data of old designs. Short circuit calculations and one-lines for permitting Anadarko drill sites.

Senior E I & C Designer

Anvil Corporation-Bellingham, WA
April 2014 to October 2014

Develop designs of Electrical Instrumentation and Control for refineries and Drill Sites:

- For BP - Electrical Department - Performed design tasks to add equipment to substation and upgraded protective relaying. Modified wiring diagrams, schematics, location and mechanical drawings.
- For Phillips 66 - Instrumentation & Controls Department - Performed design tasks to change control center. Removed equipment and rewired functions to a remote DCS system. Created demolition drawings, modified wiring diagrams, schematics, location and mechanical drawings.
- For Chevron - Instrumentation & Controls Department - Responsibilities included:

Acted as design lead and supervised and mentored three employees. Performed design tasks to change the controls for three compressors. Created new control cabinets for Compressor Controls Corporation and Bentley-Nevada equipment. Modified existing cabinets and wiring upgrading and rearranging equipment and to eliminate crosstalk.

- For Caelus - Upstream location proposed 52 drill locations. Numerous trailer mounted facilities with Power and I&C in different trailers. I reoriented transformers and major electrical equipment to shorten the cable bus and removing bends and turns saving thousands of dollars and enabling more space for electrical equipment.

Senior E I & C Designer

Tessengerlo Kerley Services-Carlsbad, NM
December 2013 to May 2014

Design and create documents for construction of Sulfur Extraction Plants. Detail drawings, cable schedules, plans, SOW, specifications, schematics, wiring diagrams. Corrected and created details with complete bills of material. Shared techniques to start project work prior to being awarded and other proactive measures increasing inter-department communication as an incentive.

Senior E I & C Designer

Wood Group Mustang-Denver, CO
January 2013 to October 2013

Develop Electrical designs for power, controls, instrumentation and facilities for

Gas Compressor and Metering Plants. Analyzed engineering for cable tray sizing, determined inadequate; generated ~\$1M change order saving major installation costs.

Senior E I & C Designer

BCCK Engineering-Midland, TX
July 2012 to December 2012

Created Electrical designs for power, controls, instrumentation and facilities for

Gas Compressor and Refining Plants. Redesigned for relocating a facility employing a Gould Modicon PLC. Received compliments on new successful installation.

Senior E I & C Designer

Kahuna Design-Westminster, CO
October 2011 to July 2012

Responsibilities included: Train / Mentor junior design drafters. Develop designs for electrical power, controls, instrumentation and facilities for Gas Compressor and Metering Plants

Senior E I & C Designer

Jacobs Engineering-Denver, CO
January 2011 to October 2011

Climax Molybdenum Mine project. Responsibilities included: Team checker of 12 designers. Designed, checked electrical drawing construction packages - installation details, cable schedules, one lines, lighting, grounding, power distribution, cable tray routing / loading, and schematics for 500+ FVNR, FVR, and

VFD motors in 480V, 2500V, and 5KV. Designs for outlying and office buildings, parking lot lighting with block heaters. Honored with a request to facilitate MSHA training to classmates and MSHA trainer in the electrical field.

Reliability E I & C Designer

Suncor Refinery-Commerce City, CO
January 2007 to December 2010

Develop Electrical, Instrumentation, Controls, Documentation. Management of Change, Process and Safety Reviews. Designed a solar power system and corrected wireless system for Asphalt Tank telemetry. Delta V and other installations, motor controls. Reconfigure Data Center power system for IT network preventing plant shutdowns.

Senior Technical Specialist

Ball Aerospace-Boulder, CO
2000 to 2007

Assigned to the Electrical Ground Support Electronics Group - Performed the wire and cable harnessing and discrete wiring for the group. Created system level cable diagrams to define connector interfaces, insert arrangements, back shells, breakouts, bonding, crimping, soldering, shielding, grounding of flight hardware in all configurations of testing; clean room, thermal-vacuum, EMI/EMC, vibration, integration tests and for launch facilities. Designed and assisted in electronics packaging of card cages, racks and chassis.

Designed an EGSE interface system employing COTS, (Commercial-Off-The-Shelf) PCB's to saving tens of thousands of program dollars. This also simplified many of the cable and harness designs.

Designed the three-phase automatic power transfer system for AC power for the Brutus thermal vacuum chamber to provide 24/7 power in the event of an outage.

I also helped the flight cable harness teams with design, checks or reviews of flight cabling for numerous programs. Select and substitute parts for component availability such as connectors, back shells, determine bundle diameters, connector breakouts, overall braiding, shielding and sleeving, modify designs or processes and system changes to meet aggressive schedules.

Ball assists PhD students from the University of Colorado with their final projects. I got involved with several of them by developing electronics, wiring, harnessing for testing and thermal-vacuum tests of their projects.

Major programs: Mars Exploration Rovers, Defense Systems, Deep Impact, NPP, Orbital Express, Kepler, Hubbell, Worldview I & II, Wide-Field and the recently launched, James Webb Space Telescope.

Electrical Designer and Electrical Shop Foreman

Isolation Technologies, Inc.-Denver, CO
January 1995 to November 1995

Designs for Pharmaceutical Isolation Glove boxes for containment of automated bottling systems and Pharmacists' tools with HVAC.

Electrical Designer

Harris Group, Inc-Denver, CO
May 1992 to February 1995

Configuration Management Team Lead on site at Public Service Company. Developed and updated, power generation and controls engineering documents

EI& C Designer

Hoechst - Celanese-Pampa, TX
September 1990 to March 1992

Major Petrochemical manufacturer. Post explosion Plant Rebuild. Power Generation, Water Treatment, numerous plant unit and infrastructure reconfigure.

Electrical, Harnessing, Cabling Test equipment Designer

Martin Marietta Denver Aerospace-Littleton, CO
September 1981 to August 1990

Initially I was assigned to the Test Tooling Department. As a team member, my tasks were design and develop test fixtures for and electronic devices and mechanisms.

Program department transferred me to Flight and Ground cabling, harnessing and discrete wiring within flight and instrument enclosures. On site at Cape Canaveral and Vandenburg AFB Launch facilities throughout my time, numerous programs.

Assisted the Human Factors Department. I helped develop the Human Control Interface concepts for modules with logical placement of controls and indicators for operators. Shuttles interface documents of the ISS, International Space Station.

GSE electrical lead for several Peacekeeper projects. The Staging truck controls and related cabling. The SICBM Small ICBM program cabling.

Acted as company representative on the Solid Rocket Booster thermal blanket and temperature sensors for the Titan IV rockets post Shuttle Challenger and the Acoustic Measuring System for the new Titan IV at Cape Canaveral. The GSE Ground Support Electronics designed to test; In-flight during lift-off to measure the rocket's skin stress during the first 20 feet of launch with over 200 mph down winds. This had never been done before but a huge success: 1st launch over 98% data collected.

While working with Defense Systems, a closed-door program, a co-worker and I worked closely with Raychem in developing harnessing products for creating multi- "legged" cables using Viton and other materials. Several satellites, missiles and miscellaneous programs, Thermal-Vacuum and other tests kept me busy for 60 - 80hr average weeks through those great challenging years.

Designed an EGSE interface system employing COTS, (Commercial-Off-The-Shelf) PCB's saving tens of thousands of program dollars. Select and substitute parts for component availability such as connectors, back shells, determine bundle diameters, connector breakouts, overall braiding, shielding and sleeving, modify designs or processes and system changes to meet aggressive schedules.

Education

AASOET Electronics Engineering Technology (Associate's of Applied Science in Electronics Engineering Technology)

ITT Technical Institute-Denver, CO
1995

Electrical Engineering (Basic classes)

Metropolitan State College-Denver, CO
1983

Drafting, Architectural, Mechanical (Associate's)

Denver Institute of Technology-Denver, CO
August 1978 to June 1979

Skills

- Agile
- AutoCAD (release 9 to current version) Computer Vision
- CADDs III & IV
- CAD/CAM
- D-Base
- SPI IN-Tools
- Micro Station
- MS Office (Word, Excel, Access, PowerPoint)
- EDMS.
- AutoCAD
- Electrical design
- Microsoft Office
- CAD
- Drafting
- Electrical design

Certifications and Licenses

MSHA Certification