Don Watson

Senior Instrumentation and Controls Engineer

Education

B.S., Electrical and Electronic Engineering Technology, Montana State University, 1986

Professional Registrations

Professional Engineer: Oregon, 2003 (No. 6563PE);

Distinguishing Qualifications

- 38 years of experience in process control
- Wide base of control experience including water and wastewater treatment, hydropower, wood products, paper mills

Relevant Experience

Mr. Watson is a Senior Control Systems Engineer with Jacobs' Corvallis, Oregon office. He has experience in the design, construction, and startup of process instrumentation and control (I&C) systems, including conventional controls, PLCs (Allen Bradley, Siemens, Modicon), and computer-based control systems (Wonderware InTouch, Wondware Appserver, Wonderware Historian, FactoryTalk View, GE iFix).

Representative Projects

Lead Instrumentation and Control Engineer, Columbia Boulevard Wastewater Treatment Plant (CBWTP) Secondary Treatment Expansion Program (STEP), City of Portland, Bureau of Environmental Services (BES), City of Portland, OR, October 2018-Present. Led I&C design of two new clarifiers, return activated sludge (RAS) pump station, mixed liquor pumping system, solids thickening, dewatering and loadout. Leading control system software development for including Modicon PLCs, GE iFIX SCADA system, testing, implementation, and training.

Lead Instrumentation and Control Engineer, Columbia Boulevard WWTP Wet Weather Clarifier and Sodium Hypochlorite System Modifications, Portland, OR, October 2023–Present. .

Lead Instrumentation and Control Engineer, Beaver Creek Water Supply; Seal Rock Water District, Seal Rock, Oregon; 2018 to 2024. Led I&C design of WesTech membrane water treatment plant. Leading control system programming including integration of WesTech package controls into the plantwide system.

Lead Instrumentation and Control Engineer and Software Design Manager; Plant 1 WWTP Upgrade; Coos Bay, Oregon; 2020 to 2023. Led design and programming of the plant control system including Allen Bradley PLC's, Rockwell FactoryTalk SCADA system, instrumentation, and interface with the client WAN.

Instrumentation and Control Engineer, Water Treatment Facility; City of Sweet Home, OR, 2018 to 2022. Control system and instrumentation support on WesTech Trident water filtration plant, assisting operating staff with troubleshooting, control programming improvements and coordinated testing with WesTech control engineers.

Instrumentation and Control Engineer, Water Treatment Facility; City of Goodyear Arizona, 2018 to 2020. Control system and instrumentation design for 8 MGD water treatment facility.

Lead Instrumentation and Control Engineer and Software Design Manager; Plant 2 WWTP Expansion & Upgrade; Coos Bay, Oregon; 2013 to 2020. Leading design and programming of the entire plant control system including Allen Bradley PLC's, Rockwell FactoryTalk SCADA system, instrumentation, and interface with the client WAN.

Software Design Manager; WWTP; City of Meridian; Meridian, Idaho; 2013 to 2020. Led two programmers in developing, testing and startup of the Allen Bradley PLC and Wonderware Archestra SCADA system controls for various plant process expansions including aeration basin controls and blower controls optimization.

Lead Instrumentation and Control Engineer, Eugene Water & Electric Board; Eugene, Oregon; 2019 to 2022. Led design of trap and haul facility instrumentation and control, video security system, and offsite communication systems.

Lead Instrumentation and Control Engineer; Eugene Water & Electric Board; Eugene, Oregon; 2017 to 2018. Led instrumentation and control system design for onsite sodium hypochlorite generation system at the Hayden Bridge Filtration Plant.

Senior Control System Design and Quality Review; Hydropower Control System Upgrade; Portland General Electric; Portland, Oregon; 2015 to 2016. Assisted with developing bid specifications for upgrading East Side Hydropower Control System. Provided QC reviews of deliverables.

Software Design Manager; WWTP; City of Nampa; Nampa, Idaho; 2015 to 2017. Led three programmers in developing, testing and startup of the Allen Bradley PLC and Wonderware Archestra SCADA system controls for the Plant Control System for Primary Effluent Pump Station, Blower PLC upgrade, and Trickling Filter Effluent Pump Station. Provided coordination between vendors, engineers, and city staff to deliver software products that meet the city standards and expectations.

Software Design Manager; Water Reclamation Facility; City of Henderson; Henderson, Nevada; 2010 to 2012. Led two programmers in developing, testing and startup of the Modicon PLC and Wonderware Archestra SCADA system controls for a 15-MGD membrane bioreactor plant.

Software Design Manager; Water Reclamation Facility; City of North Las Vegas; North Las Vegas, Nevada; 2010 to 2012. Led four programmers in developing, testing and startup of the Allen Bradley PLC and Wonderware Archestra SCADA system controls for a 30-MGD membrane bioreactor plant.

Project Manager and Lead Instrumentation and Control Engineer; Kellogg SCADA Upgrade; Clackamas County Water Environment Services; Oregon City, Oregon; 2008 to 2012. Managed replacing TI PLC's with Siemens S7 PLC controls, upgrading the Wonderware SCADA application, and designing plant control system network improvements.

Lead Instrumentation and Control Engineer; Scott Water Plant Expansion; McMinnville Water & Light; McMinnville, Oregon; 2007 to 2009. Led redesign of the entire plant control system including Allen Bradley PLC's, Wonderware Archestra SCADA system, instrumentation, and interface with the client WAN.

Lead Instrumentation and Control Engineer; Water Distribution and Wastewater Collection Control System Upgrade; Corvallis; Oregon; 2005 to 2007. Led this project to replace 19 pump station RTU controls with Siemens S7 PLC controls. Responsible for configuring and startup of Ethernet radio system, PLC and local HMI programming for each remote pump station.

Employment History

1986 to 1994, International Paper, Gardiner, OR; Project Engineer
1994 to 2000, Applied Control Technology Inc., North Bend, OR; Owner

Last Employee Update: 09/2024