E-Mail: adam@trianglepump.com ▪ Mobile: 360-977-0331

Adam Sawyer

1053 Frazier Ln, Woodland, WA 98674

Qualifications

- **Safety:** NREMT First Responder – OSHA-10 Safety Certified, PPE, harness and rigging inspection
- **Electrical:** Fluke multi-meters, AC/DC circuits, relay control, AC/DC motors, and VFDs
- **Mechanical:** Laser alignment, soft-foot correction, shaft alignment, automotive repair
- **Hydraulics:** Reading schematics, valve operation, performance analysis, troubleshooting
- **Rigging:** Load balancing, safe load turning, lifting methods, hoists, crane signals
- **Precision Measuring:** Able to proficiently read and understand calipers, dial indicators, micrometers, and others
- **Metallurgy:** Torque concepts, Tensioning, applications, fastener dynamics, sequencing
- **Climbing:** Experienced with climbing and working in heights well above 100 feet
- **Forklift:** Certified to operate forklift and extendable forklifts
- **Articulated Boom/Scissor man lifts:** Certified to operate articulated boom and scissor man lifts
- **PLC's:** Basic knowledge of programming, motor control, event sequencing, process control
- **Blueprints/ Schematics:** Architectural, mechanical and electrical blueprints and ladder logic schematics
- **Dynamic Balancing:** Able to balance rotors using Ludeca Vibxpert II
- **Vibration Analysis:** Able to diagnose vibration sources using Ludeca Vibxpert II
- **Drafting and design:** Create 2D and 3D technical drawings using up to AutoCAD 2013, Revit 2014
- **Welding:** Able to weld using MIG, arc, plasma, and gas torches

Professional Experience

Pump Start-up/ Controls Technician – *Triangle Pump, Ridgefield, WA ▪ July 2013 – May 2014*
October 2015 - Present

- Perform initial start-up of pump systems to ensure performance meets established specifications.
- Troubleshoot pump system dynamics using pump curves and pump formulas
- Quoting and performing preventive maintenance programs
- Motor balancing and vibration analysis using Ludeca VIBXPRT II
- Design booster pump systems and various mechanical parts using AutoCAD

Electrical Specialist – *USNR, Woodland, WA ▪ May 2014 – January 2015*

- Read electrical schematics and dimensioned layout drawings for building control panels/machine wiring
- Follow electrical practices and procedures to meet both USNR and UL509a standards
- Build PLC, remote I/O, and console panels
- Test control panels and/or machines for functionality, craftsmanship, and safety
- Consult with Engineers to discuss drawing revisions and red-lines
- Part of a group of employees responsible for documentation and enforcement in Lock out – Tag out

Sales Rep. /Service Technician – *Electro Inc. Vancouver, WA ▪ August, 2011 – July 2013*

- Sales, delivery, and installation of LeTourneau parts and components using Class 6 Chevy C6500 Truck
- Building customer relations with customers in Canada, Washington, Oregon, Idaho and California region.
- Overhauls, preventive maintenance, and troubleshooting LeTourneau log stackers
- Troubleshoot AC/DC electrical systems using schematics and electric flow diagrams
- Measuring parts and components using precision measuring instruments
- Drawing various parts and components using AutoCAD software

- Use multi-meter and meg-ohmmeter to test and diagnose problems in generators and motors
- Always wearing the appropriate PPE while on each job site to abide by OSHA and MSHA regulations

Journeyman Masonry Finisher – *Pioneer Water Proofing, Portland, OR ▪ August, 2008 – June 2010*

- Worked at heights well above 100ft from swing stage and man-lifts.
- Inspect integrated hydraulic lift and cable hoist systems before each use
- Filled out JHA's before starting each job task
- Responsible for company vehicles and tools using an inventory control system
- Finished a 2 year apprenticeship to become a journeyman finisher

Receiving Warehouseman – *RS Medical, Vancouver, WA ▪ April, 2005 – August, 2008*

- Performed preventative maintenance checks on hydraulic systems of forklifts before each use.
- Responsible for shipment quantities
- Entered inventory into ERP software
- Responsible for quality control of all products that was received
- Trained 3 new employees on inventory control and documentation

Electrician Assistance – *Riverside* Electric*, Washougal, WA ▪ June – August, 2002*

- Run wiring from electrical components to residential breaker panels
- Installed fixtures, circuit breakers, heaters , ranges, and lighting
- Test electrical circuits using multi-meter and amp clamp
- Install low voltage CAT5/6, RG6, RJ12, and garage door systems
- Used hand and power tools to run wire and conduit

Education

- **National Registered EMT** – Northwest Regional Training Center, Vancouver, Washington
  February, 2015 – August, 2015
- **Wind Turbine Technician Diploma** - Northwest Renewable Energy Institute *(NW-REI)* Vancouver, Washington
  September, 2010 – February, 2011 *Honor Roll / Perfect Attendance

  -A six month 54 credit school focusing on Safety, Electrical, Mechanical, Hydraulics, Rigging, Metallurgy, and Climbing - with hands on learning.
- **Clark County Skills Center** Vancouver Washington 09/02-06/03
  This was a one year pre-college course for the Automotive Technician program with classroom and hands-on training in combustion engine theory, automotive diagnostic and troubleshooting
- **Ridgefield High School Class of 2004**

Volunteer

Cowlitz County Fire District 1 – EMT Fire Fighter | September 2015 - Present

Steven M. Hook

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Vancouver, WA 98660
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TECHNICAL SKILLS:

Electrical and Controls:

- Programmable Logic Controllers (PLCs)
  - Rockwell / Allen-Bradley (PLC5, SLC500, Micro/Compact/Control Logix), Automation Direct, Mitsubishi, Siemens, Omron, Panasonic, Schneider Electric, Kollmorgen, Wago/Bosch
- HMI / SCADA
  - Rockwell / Allen-Bradley, Wonderware, Ignition, Automation Direct, Maple Systems, Schneider Electric, Omron, Red-Lion
- Communication Protocols
  - Ethernet TCP/IP, Modbus TCP / RTU, Ethercat, Serial (RS-232/485), Profinet, Profibus, Devicenet, Zigbee, OPC UA

Robotics:

- Fanuc, ABB, Denso, Kawasaki, Delta, Cobot
- 6+ axis, Gantry, Paint Booth, Welding, Collaborative etc.
- Vision Systems, Conveyor Tracking, Palletizing etc.

Software:

- Experience with all languages approved by IEC 61131-3 with a specialty in Ladder Logic.
- Proficient in Python with limited experience with Java, C, C++ and C#
- Windows 11, 10, 7, XP, 2000, 98, 95, comfortable with Ubuntu.
- AutoCad Electrical, Draftsight, Solidworks Electrical, SketchUp
- Intermediate knowledge of Machine Learning, Artificial Intelligence, and Deep Learning theories and practices. Limited hands-on experience with TensorFlow, Keras, NumPy, Pandas, and Matplotlib

EMPLOYMENT:

Owner / Engineer: NW PLCs LLC (August 2020 - Present)

- Independent Contractor for Industrial and Automation Controls across a wide variety of industries.
- Services include:
  - Electrical Design and Schematic Building
  - PLC/HMI/SCADA Programming
  - Robotics Integration
  - Installation, Commissioning, and Training
  - Troubleshooting and Support

Course Instructor: Portland Community College (January 2022 - Present)

- Instructor of 3 courses at PCC's Oregon Manufacturing Innovation Center (OMIC) as part of the Mechatronics certification:
  - PLC Fundamentals - 3 Credit Hours
  - Advanced PLCs - 3 Credit Hours
  - System Automation and Networking - 3 Credit Hours
- Developed course content, training materials, and lesson plans for each of the courses.

Beyond The Box Solutions, Controls Systems Engineer/Integrator (March 2018- August 2020)

- Manage electrical, controls, robotics, and automation projects throughout the project lifecycle.
- Support a wide variety of customers and projects from emergency support to capital expenditure projects.
- Hands-on experience with a wide variety of controls platforms, robots, machinery, and equipment, spanning several industries including aerospace, food processing, timber and many more.

Leatherman Tool Group, Senior Controls Engineer (June 2015- November 2017)

- Project Management and Controls Systems designs of Machine Build/Rebuilds up to $500,000.
- Oversaw controls and automation architecture of the plant.
- Designed and implemented plant-wide Controls/PLC network allowing for monitoring, data-collection and analysis, remote access, and structured back-ups,.
- Planned, designed, and commissioned a central PLC to power new equipment remotely throughout the plant. Expandable for affordable future machinery and equipment.
- Developed plant-wide central processing cabinet allowing for effective, expandable and affordable remote IO.

Dematic Corp., Controls Engineer II (May 2011- June 2015)

- Project Lead - Oversaw a team of up to 6 engineers through design, purchasing, and implementation of control systems for customer material handling needs.
- Manage labor hour forecasting and distribution among the engineering team.
- Financial forecasting and budgeting for the controls portion of projects up to $5M including labor, hardware, resale, and travel.
- Hardware design of control and power distribution cabinets and associated external devices with voltages between 24v-480v. Drawings created via AutoCad Electrical 2010.
- Work directly with many Fortune 500 companies (WalMart, AmerisourceBergen, Walgreens Co., etc. and many more) to meet their specific needs.

EDUCATION:

- Bachelor of Science - Electrical Engineering - Michigan Technological University - Class of 2011
- NCEES Fundamentals of Engineer Exam - April 2012 - *Verifiable Link*