**CHRISTOPHER W. LYNCH**2001 83rd Ave. N. Lot 4012.
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**RESUME:
ABILITIES AND SKILLS:**

* 30 Years of practical proven mechanical engineering and design experience
* Proficient in Autodesk Inventor Professional 2021
* Proficient in Autodesk Fusion 360
* Knowledge of AutoCAD, Mechanical Desktop
* Familiarity with and experience designing to NEC, NFPA, DOT and CGA standards
* Experience with MRP/ERP systems and system implementation
* Knowledge of mechanical, electrical, pneumatic and hydraulic systems
* Knowledge of robotics, sensors, industrial automation, PLC’s, HMI’s and controls
* Multiple patents received for my employers as Inventor
* Experience designing to and familiarity with CE & ATEX European standards
* Ability to work independently
* Experience writing and creating industrial control electrical schematics
* Experience writing and creating industrial process & instrumentation diagrams (P&ID’s)
* Experience writing Process, Safety and processes and procedures

**EXPERIENCE:**

**08/2022 to present**Various Side Jobs and job hunting
Local

**05/2021 to 07/2022**RA SANCTUARIES / CIEL
Global/Remote
Mechanical Engineer (Hydraulic/Telescopic Boom Design). Responsible for designing a mobile robot with a robotic arm/boom to construct custom homes with the ability to lift, manipulate and maneuver 6000lb sections of the homes over 40 feet in the air and accurately position them over a 75 x 200ft site to assemble the homes. Also designed the panel and module connections for the homes to allow the robot to set them in place and to have them properly aligned and locked into place without the need for laborers to fasten the modules and panels.

**03/2010 to 02/2021**TARONIS TECHNOLOGIES / MAGNEGAS CORPORATION, Clearwater, FL
Systems Engineer, Chief Mechanical Engineer. Responsible for complete design, manufacturing, fabrication, electrical controls, all components, HMI system, assembly and testing of custom gasification equipment used to make a hydrogen-based gas used as an acetylene replacement and as a natural gas alternative, from hydrocarbon-based products. Responsible for all drawings (detail, assembly etc.), BOM’s, schematics (electrical, fluid, pneumatic, P&ID’s, flow & block) CE testing and documentation (including technical file) using Autodesk Inventor, AutoCAD, Microsoft Office and any other software required. Supervised all personnel regarding manufacturing, assembly, testing, and operation, including Fabricators, Electricians, Assembly Technicians, and Operators. Responsible for all component and material specification, including metals, plastics ceramics, etc., as well as all electronic and electric controls, process components such as compressors, power supplies, sensors, filters, valves & safety components. Responsible for full integration of all components, including complete system automation. Also responsible for R&D, design, and testing to increase machine efficiency and longevity, reduce costs, and make the equipment easier to assemble, maintain, and increase safety. Designed complete equipment control systems, including control logic, HMI, PLC, I/O, user interface graphics, operation, safety, and maintenance manuals.

**01/2005 to 01/2010**Hi-TECH ELECTRONIC DISPLAYS, Clearwater, FL
Mechanical Engineer. Designed custom & standard LED displays & LED video displays, such as center-hung displays & large video displays for stadiums & sports arenas using Autodesk Inventor & AutoCAD Mechanical Desktop. Responsible for all Designs, Detail & Assembly Drawings, installation & maintenance documentation, manufactured part procurement, prototype design, verification & initialization of prototype parts & components. Responsible for all documentation control procedures & integration of procedures with the MRP system. Consistently coordinated multiple concurrent Custom Engineering projects on time & on budget. Solely responsible for all new product designs & R&D projects to meet specific customer requirements & sales demographics.

**07/2004 to 01/2005**ABOVE BOARD DRAFTING, Pasadena, FL
Freelance Patent Drafting created AutoCAD drawings from inventor sketches, photos & written descriptions to be used in the patent submittal process.

**04/2002 to 03/2004**DTC COMMUNICATIONS INC., Nashua, NH
Mechanical Designer. Created 3D mechanical designs, including detail and assembly drawings of audio & video surveillance equipment for use by law enforcement, military & the secret service using Autodesk Inventor and AutoCAD. Created and maintained complex bills of materials with integrated MRP system. Specified required parts, materials, and components. Developed and fabricated prototype parts, equipment, and systems. Dictated and performed Engineering Change Orders. Coordinated Engineering projects.

**03/2001 to 07/2001**GREENARD PRESS & MACHINE CO, Nashua, NH
Design Engineer. Responsible for the design, specification, documentation, and inspection of standard and custom hydraulic presses using MDT5 with Powerpack to create fully parametric models of complete equipment, then created 2D manufacturing drawings for production, performed finite element analysis on frames to provide pre-production data such as deflections and stress levels.

**02/1998 to 03/2001**PRAXAIR TAFA, Concord, NH
Custom Systems Design Engineer. Performed the design, specification, documentation, testing, and procurement of custom water-jet stripping and thermal spray systems and all related equipment, including electrical controls, mechanical components, and test and calibration equipment. Defined and interpreted customer specifications and requirements for given project assignments. Used AutoCAD and Excel to document designs and produce 3D concept drawings to aid sales and marketing. Produced and maintained documentation, including drawings, BOM’s manufacturing instructions, operator and maintenance manuals. Provided specialized support to field service and customers related to custom equipment. Also performed demonstrations of equipment in support of sales.

**09/1995 to 02/1998**Manufacturing Design Engineer. Performed the design, development, specification, documentation, testing, and fabrication of prototypes of thermal spray equipment and related accessories. Interpreted customer’s specifications and requirements for given project assignments. Used AutoCAD to document designs and check feasibility as required. Produced and maintained documentation, including drawings, BOM’s manufacturing instructions, test procedures, and inspection criteria. Provided support to manufacturing for production and prototype equipment by working with shop personnel or producing components personally. Assisted in writing manuals for equipment and related documentation. Performed demonstrations of equipment in support of sales. Assisted customers in system start-up, training, and continuing product support in the field and in manufacturing. Met cost, budget, and timeline goals of projects.

Praxair/Tafa cont.

**06/1994 to 09/1995**Systems Assembly Technician. Performed various duties, including design, fabrication, and assembly of custom arc spray and water jet systems, redesign and/or machining of custom components, guarding and safety systems, as well as modifications of existing and purchased parts to facilitate assembly. Worked with customers to achieve system verification approval. Assisted engineering as to the most feasible modification to existing components to achieve system verification in a timely manner.

**12/1993 to 06/1994**AUTOMATED ASSEMBLIES CORPORATION, Clinton, MA
Robotics Engineering Technician. Worked in product development, designing simulation mechanisms for life testing of robots. Evaluated existing designs and made improvements to facilitate production and increase accuracy and durability of robots and their components. Debugged robotic systems and performed customer qualification testing of manipulated product and system performance approval where required. Performed manufacturing and assembly duties quickly to meet shipping schedules.

**07/1989 to 12/1992**HOLLIS AUTOMATION CO., Nashua, NH
Senior Assembly Technician. Performed mechanical and electrical assembly. Troubleshooted and tested production wave soldering machines and PCB cleaning systems and all related equipment. Worked with Research and Development and Engineering to facilitate production of machines. Evaluated and upgraded prototype designs and machines. Performed Design Verification Testing.

**09/1986 to 02/1989**APPLIED ROBOTICS CO., Amherst, NH
Robotics Technician. Assisted in design of custom industrial robotics systems, including feeders and operator interface systems. Performed mechanical and electrical assembly. Tested and troubleshooted robotics systems. Installed and serviced robotics systems at customer’s facilities. Programmed, set up, and operated CNC milling machine.

**EDUCATION:**

**New Hampshire Vocational Technical College, Nashua, NH**Associates degree in Electro-Mechanical Drafting

**Polytechnic Institute of New England, Nashua, NH**Certificate in CADD

**DTI Technologies, Bedford, NH**Certificate in AutoCAD R14

**DCS Incorporated, Stoughton, MA**Certificate in AutoCAD Mechanical Desktop 5

**M2 Technologies, Bedford, NH**Certificate in Autodesk Inventor 6

**PROFESSIONAL REFERENCES AVAILABLE UPON REQUEST**