Paul Craig

CONTACT

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WORK EXPERIENCE

University of Wisconsin Stout — 2009 — Present

Instrumentation Innovator/ Instructor — 2018- Present

Lecturer — 2009- Present

Controls & Instrumentation, ENGR 363

- Content creation of class material including presentations, quizzes, and lab work
- Content included: online presentations of basic device functions and design parameters, Boolean logic, logic gates, pneumatic logic systems, relay logic systems, PLC logic programming, motors, sensors and relays, servo and stepper motor controls and PID control systems.
- Programming included: Allen Bradly Studio 5000, MicroLogix and Connected Components Workbench for the Micro800 series programming platforms.

Capstone II, ME-410

- Guide students through the controls design of an industrial machine build project.
- Assist and guide students through the key steps in designing automated equipment.
- Assist and guide students through the physical build and troubleshooting of automated systems.

Industrial Robotics & IIot Fundamentals, ETECH-230

- Content creation of class material including presentations, quizzes and lab work
- Content included: basic machine theory, set-up, and processing of robot motion

Computer Aided Manufacturing, MFGT 303 & ENGR 325

- Content creation of class material including presentations, quizzes and lab work Content included: basic machine theory, routing, set-up, and processing of CNC work
- Programming included: G-Code, machine specific conversational programming and SolidWorks integrated programming system CamWorks

Electrical and Mechanical Interface Devices, ET 341

- Content creation of class material including presentations, quizzes, and lab work
- Content included: online presentations of basic device functions and design parameters, Boolean logic, logic gates, pneumatic logic systems, relay logic systems, PLC logic programming, motors, sensors, and relays.
- Programming included: Allen Bradly RSLogix 5000 and Allen Bradly MicroLogix programming platforms

Mechatronics, POWER 371

- Content creation of class material including presentations, quizzes, and lab work
- Content included: basic electronic systems used to drive mechanical systems, circuit board creation and testing, soldering techniques, introduction to programming systems, and introduction to CNC machining

Delkor Systems Inc 2013 — 2018

Director of Information Systems

- Responsible for all computer systems and software integration.
- Define 3-year strategic goals for information systems department
- Define monthly department projects for a three-month time frame and present to executive team monthly
- Define system level integration and automation enhancements requested by various internal departments Determine if project will be developed internally or by an external VAR software reseller or individual.
- Create project scope documents detailing user expectations and resulting output generated by project. Develop working procedures with departments using new solution
- Integration of SolidWorks and DBWorks in Engineering, integrated automation with Microsoft Navision business system for importing new parts, assemblies, and bills of material.
- ECR/ECN process definitions and documentation and automation.
- Make recommendations to management on available improved technologies and systems.

Delkor Systems Inc 2007 — 2013

Network and Systems Engineer

- Responsible for all computer systems and software integration.
- Design and Maintain Network Security
- Configure domain level users and user rights, add and remove users as required.
- Maintain network security for both wireless and wired access.
- Set up VPN access, or remote computer access, for all mobile users and contract users.
- Monitor backup and business continuance plans.
- Configure, maintain, and support all workstations, laptops, servers, printers, and all supporting network devices.
- Assist in training program for new enhancements for personnel using the solution.
- Troubleshoot and repair computer hardware.
- Customer Relations Management Software SharePoint web portal administration Monitor software licensing and compliance.
- Monitor available software upgrades from vendors.
- Purchase all software and hardware for both computer and phone infrastructure.
- Administrate Microsoft Office 365 systems.
- Website design, coding, updating, and monitoring.
- Administrate GoDaddy Account for domain names, ICANN requirements and website hosting. Monitor time clock system
- Configure communication between network and machine tools in shop area.
- Phone systems monitor, configure, and assign extensions to new users.
- Provides help desk support to corporate computer users.

Delkor Systems Inc 2006 — 2007

Electrical Engineer

- Analyze how a machine will function and creates functional specifications. Design electrical system for customer machines
- Evaluate customer specification packages to determine scope and costing of project Design electrical panel layouts and corresponding bill of materials.
- Develop and draws schematics and other required documentation.
- Collaborate with controls programmer to meet required functions in accordance with machine specifications.
- Assist service and assembly departments with electrical debugging of machines being put together on the floor and occasionally in the field at a customer location.
- Report machine or plant safety concerns to the department manager. Document electrical standards for panel construction and machine assembly. Research and development of new product electrical systems.
- Assist Service Department in troubleshooting machines in the field via telephone or while on-site at the customer's facility.

Large Capacity Machine 2004 — 2005

Operations Manager/Manufacturing Engineer

Small machining service center producing large parts. Parts range in size up to 80-inch diameter, 40 inches long or 110 inch by 79 inch with weights upwards of 7 tons. Cycle times range from 2 hours to 125 hours per part.

- Multi-functioning position responsible for all management and manufacturing engineering duties.
- Coordinated all personnel scheduling and time management.
- Facilitated production scheduling and job cost analysis using Windows based office applications. Created operational efficiencies after resource merger.
- Initiated set up and cycle time reduction program through use of progressive tooling, process modification and fixtures. As a result, most production cycle times were reduced by 15%.
- Designed fixtures and research optional tooling for long run production jobs. Created set up sheets and work instructions for individual jobs.
- Estimated, prepared, and presented cost and time quotes for customers. Merged all offline Computer Aided Design (CAD), Computer Aided Manufacturing (CAM) using AutoCAD and SurfCAM. Edited and created manual machine G-code programs.
- Administered quality standards. Certified material production systems.

Hudson Machine and Tool 1997 — 2000

Manufacturing Engineer

- Sourced all raw materials for production jobs
- Routed all jobs based on machine capabilities, job size and work center load Installed computer-based program storage/ retrieval system for CNC machine tools
- Installed and configured server-based job production control system to produce job estimates for customers, schedule jobs, monitor job status and track time against a job
- Initiated set up and cycle time reduction program through use of progressive tooling, process modification and fixtures. As a result, most production cycle times were reduced by 15%.
- Designed fixtures and research optional tooling for long run production jobs. Created set up sheets and work instructions for individual jobs.
- Estimated, prepared and presented cost and time quotes for customers.
- Managed all offline Computer Aided Design (CAD), Computer Aided Manufacturing (CAM) using AutoCAD and

SurfCAM. Edited and created manual machine G-code programs.

Doboy Packaging 1988 — 1997

Maintenance Electrician A

- Electro-mechanical maintenance electrician responsible for:
- Troubleshoot and repair all CNC equipment throughout the two buildings
- Troubleshoot and repair all HVAC units
- Install new power grid system layout for manufacturing floor
- Design and implement a preventative maintenance program for all machine tools
- Install and configure first personal computer-based CNC program storage and retrieval system which replaced paper tape programs
- All wiring based on National Electrical Code standards

Doboy Packaging 1987 — 1988

Electrician A

- Industrial electrician, responsibilities included:
- Main and sub panel layout and wiring
- Design and installation of conduit runs
- Complete wiring of packaging system
- Initial start-up and verification of PLC I/O

EDUCATION

Master of Science, Manufacturing Engineering 2019 — 2022

University of Wisconsin Stout

Bachelor of Science, Manufacturing Engineering
Business Administration Minor 1995 — 1998

University of Wisconsin Stout

- Summa Cum Laude Graduate ABET Accredited Program
- Broad curriculum included Simulation of manufacturing lines, Controls in automation and PLC programming, Computer Aided Design (CAD), Computer Aided Manufacturing (CAM), Facility layout, Quality Engineering, Robotics, Plastics Processing, CNC programming, Casting Processes, Mechanics of Materials, Statistics, and Business Administration.

Electrical Construction and Maintenance 1984 — 1987

Dunwoody Industrial Institute

- Electronics
- Residential wiring code Commercial wiring code Industrial wiring code Power Transmission Power generation
- Programmable logic controllers Circuit design and layout Schematic documentation

REFERENCES

References available upon request.