

DYLAN PARSONS

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PROFESSIONAL SUMMARY

Software engineer specializing in industrial control systems and full-stack development. Experience leading development initiatives from concept to deployment with focus on system integration, quality control software, and hardware interfacing. Technical background in C#/.NET, C++, and web technologies.

PROFESSIONAL EXPERIENCE

SOFTWARE DEVELOPER & PRODUCT OWNER

LiteSentry LLC | January 2022 – Present

- **Industrial Sensor Systems:** Led development for thickness and coating sensor products (TS3000/TS4000), implementing XML data processing, multi-threading optimization, and network configuration. Modified sensor management software to support custom IP addressing beyond the default 192.168.160.X format.
- **Quality Control Applications:** Enhanced the LoadValidator system with hardware integration that automatically halts production when vision systems detect quality issues. Implemented broken glass detection with relay integration for factory safety controls.
- **System Integration:** Created the Osprey Archive Server Uploader for transferring inspection data to centralized databases. Implemented API key authentication, error logging, and automated file management. Built USB-based deployment scripts for simplified field updates.
- **Hardware Interfacing:** Redeveloped control software for a legacy stress measurement system, migrating from Keithley KPCI-3101 data acquisition hardware to PCIe-DAS1602/16 architecture to enable 64-bit compatibility.
- **Development Infrastructure:** Implemented an on-premises GitLab server with CI/CD pipelines for automated builds and testing of C# applications. Standardized development workflow across multiple products.
- **Technical Documentation:** Updated user manuals and created technical bulletins for software releases. Developed internal documentation for troubleshooting and development processes.

IT CONSULTANT (SELF-EMPLOYED)

October 2019 – 2021

- Built WordPress-based websites for small businesses, handling database design, hosting configuration, and theme customization
- Managed Exchange 365 deployments and migrations
- Provided ongoing technical support and infrastructure management

SOFTWARE ENGINEERING INTERN

TSI Incorporated | May – August 2016

- Contributed to TrakPro data analysis software development using C# and .NET
 - Participated in testing and QA processes for product release
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EDUCATION

Bachelor of Science in Computer Science, Minor in Mathematics

Southwest Minnesota State University | May 2021

- Contributed to university website development team
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NOTABLE PROJECTS

- **PLC Tag Extractor:** Utility for extracting and managing tag configurations from Allen-Bradley controllers using InGear libraries
 - **Deployment Automation:** Created USB-based update system with self-validating installation scripts
 - **iOS Voice Integration:** App enabling Siri to read data from cloud-hosted health monitoring services
 - **Chemistry Simulation:** Windows application modeling laboratory processes for educational settings
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VOLUNTEER WORK

- **Literacy Volunteers of SW MN:** Taught programming to middle school students using Raspberry Pi
 - **Res-Q Zone:** Built network deployment server for county electronics recycling program
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TECHNICAL SKILLS

Languages: C#/.NET, C++, Python, JavaScript, HTML/CSS, PHP

Databases & Integration: SQL (MySQL/PostgreSQL), REST APIs, XML processing

Development Tools: Visual Studio, Git/GitLab, CI/CD pipelines

Industrial Systems: Embedded software, PLC integration, vision systems

Web Development: WordPress, PHP, content management systems

CERTIFICATIONS

- Scrum Master Accredited Certification
- JavaScript and React for Developers
- Data Science A-Z Certification