

MATTHEW EDGE

Software Engineer | C#/.NET | Windows Applications & Systems Integration

Greensboro, NC | mattedge.dev | LinkedIn: matthew-edge

PROFILE

Industrial software and systems integration professional with experience spanning Windows application development, equipment communications, databases, commissioning, and support. Combines hands-on development with technical scoping, customer communication, and cross-layer troubleshooting. Earlier technical service experience informs a practical approach to reliability and recovery.

CORE TECHNICAL SKILLS

Applications: C#, VB.NET, .NET 8, .NET Framework 4.8, WPF, WinForms, dependency injection, modular architecture.

Data: SQL Server, SQL Server Express, SQLite, Dapper, Entity Framework Core, ADO.NET, LINQ.

Integration: TCP/IP, RS-232/serial, MT-SICS, MODBUS, EtherNet/IP, Shared Data APIs, terminals, readers, printers, PLC interfaces.

Delivery: requirements, estimating, testing, commissioning, training, Git/GitHub, logging, deployment and production support.

PROFESSIONAL EXPERIENCE

Software Developer - Industrial Automation & Systems Integration

Carlton Automation / Carlton Industrial Solutions | Greensboro, NC

June 2022 - Present

- Develop, modernize, deploy, and support industrial applications for weighing, filling, material tracking, data collection, ticketing, labeling, identification, and reporting.
- Build C# and VB.NET Windows solutions with service boundaries, hardware abstractions, configuration, structured logging, error handling, and deployment patterns.
- Integrate applications and SQL data layers with industrial terminals, readers, printers, PLC interfaces, remote I/O, and customer enterprise systems.
- Diagnose issues spanning application code, persistence, database permissions, networking, certificates, firmware, device communications, and field workflows.
- Carry software work from discovery, requirements, feasibility, and estimating through implementation, acceptance, commissioning, customer training, and ongoing support.

Selected professional scope: multi-station weighing modernization; modular .NET 8 architecture; device/terminal migration; legacy application maintenance.

SELECTED PERSONAL ENGINEERING PROJECTS

Personal projects use AI-assisted development, with responsibility for requirements, engineering decisions, review, debugging, and validation.

PLCWorkbench | C# / .NET / WPF

Offline logic simulator with deterministic scans, controller modes, typed tags, scenarios, watches, and traces. Local 1.0 release with bounded qualification; no physical PLC connection or safety certification.

mattedge.dev/work/plc-workbench/

OperatorCanvas | React / TypeScript / ASP.NET Core

Editable industrial workflow prototypes with reusable controls, templates, isolated simulation, and review/export work. Prototype only; sharing/export milestone remains in progress.

mattedge.dev/work/operatorcanvas/

MeetingEdge | C# / WPF-WebView2 / React / SQLite

Local-first recording, transcription, and evidence-linked notes with separate speech and interpretation providers. In development; hardware and long-session qualification remain.

mattedge.dev/work/meetingedge/

EARLIER EXPERIENCE

Field Service Technician / Satellite Installer

DirecTV Home Services | Hillsborough, NC | June 2002 - March 2016

Installed and repaired satellite, broadband, and wireless systems; managed technical diagnosis, customer communication, equipment, and user training.

Arcade Game Technician / Manager

Celebration Station | Greensboro, NC | July 2001 - May 2002

Preventive maintenance, troubleshooting, and operation of electronic and electromechanical arcade systems.

EDUCATION

Associate in Applied Science - Information Technology (Mobile App Development)

Alamance Community College | Graham, NC | 2017 - 2020 | GPA: 4.0

Certificates: Information Technology - Web Design; Information Technology - Business Support; Mechatronics Engineering Technology - Basic.