THOMAS SMITH
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SENIOR .NET DEVELOPER | AI | CAD SME

Results-driven software engineer with 7+ years' experience in .NET development, 12 years in CAD design, and data engineering. Expert at designing scalable business applications, optimizing engineering workflows, and implementing AI-powered solutions. Proven impact across manufacturing, SaaS, e-commerce and product data management environments. Recognized for accelerating project delivery, automating manual processes, and bridging the gap between engineering and IT.

TECHNICAL SKILLS

• Languages: C# (12/13), .NET 8/9, Python, SQL, T-SQL, JavaScript, VBA
• Frameworks: ASP.NET Core, Blazor (Server/WASM), WinForms, ML.NET, EFCore, Webforms, WPF
• AI & Data: GitHub Copilot, OpenAI, ChatGPT Plus, Grok, Gemini, RAG, Data Modeling, ETL, Power BI
• CAD/Engineering: Inventor API, iLogic, SolidWorks API, AutoCAD, PTC Windchill, Epicor ERP, PLM/PDM Integration, AutoCAD, AutoLisp
• DevOps/Cloud: Azure DevOps, GitHub, Vercel, Docker (basics), AWS, Firebase, Netlify
• Tools: Visual Studio, SSMS, Git, PowerShell, Adobe Acrobat, LiveCharts, Chart.js

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PROFESSIONAL EXPERIENCE

HABASIT AMERICA — CAD Drafter | CRM | PDM | ERP
Suwanee, GA | 2024–Present

Industry-leading manufacturing transformation: Orchestrated end-to-end digitalization of engineering workflows, quadrupling output and setting a new standard for product data automation.

• Spearheaded digital transformation of the special build plastic modular belt engineering workflow, leveraging .NET, C#, and SolidWorks API with a goal to quadruple drawing throughput (from 8 to 30+ per day).
• Built and deployed a Blazor-based Drawing Number Generator and automated request processing tools, reducing manual entry errors and standardizing drawing packs.
• Integrated AI-powered parsing (LLM/ChatGPT) to automate extraction of drawing parameters from SugarCRM and email requests, eliminating repetitive data entry.
• Designed custom dashboards (Power BI, Chart.js) for KPI reporting, bottleneck analysis, and process improvement, driving measurable efficiency gains.
• Led database migration and integration projects with Epicor ERP, improving traceability and data governance.
• Collaborated with IT and engineering management to set and enforce CAD and PDM standards, supporting future PDM migration.

1PATH SYSTEMS — Senior Software Architect
Atlanta, GA | Sep 2022 – Mar 2023

Legacy ERP modernizer: Delivered modular API-first architecture and technical leadership that halved project delivery time for a mission-critical platform.

• Led design and development of new modules and features for “Atlas,” a mission-critical legacy ERP system, partnering closely with a compact team of 3 developers.
• Modernized .NET Framework 4.6.2 WinForms and ASP.NET Web Forms applications, introducing robust, scalable features to support evolving business needs.
• Engineered secure Web API integrations with single sign-on (SSO), connecting Atlas to other enterprise systems and streamlining user access across platforms.
• Refactored legacy code and optimized SQL Server-backed data flows, reducing technical debt and improving app performance.
• Implemented advanced UI/UX components (Infragistics), improving user productivity and interface consistency.
• Authored comprehensive technical documentation in Markdown to streamline onboarding and support ongoing maintenance.
• Facilitated efficient collaboration and release management with Git, SourceTree, Code Compare, and Microsoft Teams (including offshore coordination).
• Managed production deployments, hotfixes, and customer-facing release notes using Outlook and integrated project tools.

Key Technologies: C#, VB.NET, .NET Framework 4.6.2, WinForms, ASP.NET Web Forms, Web APIs, SQL Server, JavaScript, TypeScript, JQuery, Infragistics, Git, SourceTree, Visual Studio, Teams.

DAIKIN APPLIED — Sr. IT Applications Developer
Minneapolis, MN | 2022–2023

Industrial software guardian: Maintained, refactored, and API-enabled global legacy platforms, unlocking new automation for 500+ engineering users.

• Served as primary owner and lead developer for “Daikin Tools,” a complex suite of legacy .NET WinForms applications supporting critical engineering workflows.
• Modernized, refactored, and documented legacy codebases—improving reliability, performance, and maintainability of business-critical apps used across the company.
• Developed, maintained, and enhanced custom APIs and Web Forms integrations, introducing secure single sign-on (SSO) for streamlined user access.
• Managed on-premise SQL Server databases and IIS deployments; built data-driven features to support engineering, operations, and analytics needs.
• Coordinated Autodesk (CAD) licensing management and introduced automation features for CAD library workflows, quickly ramping up on unfamiliar platforms (including VectorWorks).
• Led troubleshooting, debugging, and hotfix delivery for production applications, ensuring minimal downtime and fast resolution of user issues.
• Collaborated cross-functionally with business analysts, engineers, and directors to translate operational needs into technical requirements and deliverables.
• Leveraged C#, VB.NET, ASP.NET, JavaScript, TypeScript, DevExpress UI, Visual Studio, TortoiseSVN, and SourceTree for full-lifecycle development and support.
• Provided mentorship to junior developers and facilitated team knowledge sharing in hybrid and remote settings.

Key Results:
• Achieved significant reduction in legacy app errors and improved uptime through targeted refactoring.
• Rolled out new API endpoints enabling smoother integrations and automation with engineering/CAD tools.

• Delivered on tight timelines for critical features and production fixes, earning positive feedback from stakeholders.

FRY REGLET CORPORATION — Alpharetta, GA | 2017–2021

Operations Technology Specialist
Mar 2019 – Sep 2021

AEC digital catalyst: Drove cloud-first business process automation across operations, enabling rapid estimation-to-delivery for national projects.

• Championed digital transformation initiatives across operations, engineering, and estimation, officially transitioning from CAD to .NET and cloud application development.
• Led the full software development lifecycle for custom business apps, collaborating with Georgia Tech's Twin Engines group and D3 Technologies (TX) to design, prototype, and deliver scalable process automation tools.
• Pioneered collaborative programming and code reviews using GitHub and paired programming methodologies, building a foundation for a modern, agile dev team within the organization.
• Partnered with cross-functional teams (sales, PM, engineering, customer service) to ideate, scope, and implement technology solutions, driving measurable gains in efficiency and project throughput.
• Transitioned from the engineering department into Information Systems, establishing best practices for internal tool design, deployment, and support.
• Key technologies: C#, Python, Azure, Git, SQL, Visual Studio, .NET, and cloud-first architectures.

CAD Technical Manager
Aug 2018 – Mar 2019

Manufacturing automation leader: Drove design-library and automation standards for large-scale infrastructure projects.

• Directed a team of designers and developers, delivering advanced design automation and custom CAD libraries for complex manufacturing projects (including wall panel systems and airport renovations).
• Oversaw technical standards for 3D assembly modeling, drawing automation, and data integration between engineering and manufacturing systems.
• Developed robust automation solutions using C#, VB.NET, and Python, and ensured alignment between production requirements and CAD output.

CAD Designer & Automation
Aug 2017 – Aug 2018

Production design automation specialist: Delivered high-precision CAD and laid the technical foundation for all future digital initiatives.

• Delivered detailed 3D models and production drawings for large-scale commercial and architectural projects.
• Automated routine drafting and drawing tasks using Inventor iLogic, AutoCAD, VB.NET, and Excel VBA, laying the groundwork for process automation initiatives adopted company-wide.
• Collaborated directly with engineering, fabrication, and estimation to ensure accurate, on-time project delivery.

Major Achievements:
• Drove transition from ad-hoc engineering tools to standardized, cloud-integrated business apps, resulting in faster estimates and project launches.
• Fostered a culture of code collaboration and agile development, upskilling the department in modern software practices.
• Successfully delivered cross-departmental solutions adopted by sales, project management, and operations teams.

AI, AGENTIC SYSTEMS & EMERGING TECHNOLOGIES | Self-Study & Open Source
2020–Present

• Dedicated 1,000+ hours to independent study and rapid prototyping across the latest AI, LLM, and automation trends—translating self-learning into real-world results.
• Researched, implemented, and iteratively improved workflows using OpenAI (GPT-3/4, DALL·E), Google Gemini, Grok, Anthropic Claude, RAG (Retrieval-Augmented Generation), and agentic orchestration frameworks.
• Designed and deployed hobby and experimental projects leveraging LLMs and generative AI for document automation, code generation, image synthesis, data extraction, and process optimization.
• Built, tuned, and benchmarked agentic multi-step workflows, integrating LLMs with custom code, MCP servers, and cloud APIs for intelligent automation across business and creative use cases.
• Applied knowledge from dozens of technical books, research papers, and online coursework, driving continuous growth and cutting-edge awareness in AI, prompt engineering, and workflow automation.
• Maintained hands-on familiarity with bleeding-edge tools, Python and C# AI SDKs, custom RAG pipelines, and end-to-end LLM deployment on private/local infrastructure.

EDUCATION

Montgomery College – Germantown, MD
Computer Science & Engineering Coursework
• Completed advanced coursework in computer science, engineering, and mathematics

Tarrant County College – Grand Prairie, TX
Computer Science & Mathematics Coursework
• Dean's List honoree for academic excellence

Watkins Mill High School – Gaithersburg, MD
Diploma, Project Lead The Way STEM Program
• Graduated 2008, Honor Roll student

CERTIFICATIONS

• 78 LinkedIn Learning Certifications (Technical & Leadership Courses)

SELECTED ACHIEVEMENTS

• Increased CAD drawing delivery by 400% via process automation (Habasit America, 2024)
• Automated data extraction from 1000+ legacy drawings, improving search speed 10x (Fry Reglet)
• Designed and implemented AI-powered parameter extraction for unstructured CRM/email data (2023–2024)
• Reduced engineering project turnaround by 50% through .NET automation and database integration (1Path)

PROJECTS & GITHUB

• GitHub: github.com/cadguardian (sample code, AI/CAD automation, dashboards)
• Portfolio: tsmithcode.ai, www.youtube.com/@tsmithcad

References available upon request