

# TOM KNOWLTON

American Fork, UT | 801.604.0780 | softwaredevr@gmail.com | linkedin.com/in/tomknowlton

## SOFTWARE DEVELOPER

### Software Development | Database Management | Frontend Development

Solutions-driven Software Engineer with 30+ years of experience in design, development, and implementation of complex software solutions using various technologies. Proven ability to quickly learn new languages and frameworks.

*Eager to leverage existing strong foundations in both the Microsoft Technology Stack and transferable web development skills to contribute to your team's objectives. Proficient in a variety of technologies and adaptable to different project requirements, allowing for effectively contributing to any cloud-based, web or on-premises initiatives.*

Recognized for building software based on requirements specifications and constraints. Track record in design, execution, and testing of diverse subsystems and system components. Collaborative team player with excellent communication skills, interacting with software engineers, technical leaders, and Product Owners.

Proven aptitude to document, implement, and debug intricate subsystems and components for optimal functionality. Instrumental in guiding teams in designing, building, testing, and deploying software changes. Focused individual with proficiency in frontend development; possess expertise in legacy ASP.NET webforms, HTML, CSS, and JavaScript. Talented in backend development with a strong background in C#, ASP.NET, and SQL Server.

- Software Development Processes
- Test Planning & Execution
- Application Development
- Virtual Machine Requirements
- Technical Infrastructure Support
- Software Development Tools
- Application Server Software
- Debugging with Source Debuggers
- Software Design
- Microsoft Tech Stack
- APIs & Messaging Strategies
- Mentorship & Team Collaboration

### KEY NOTABLE ACHIEVEMENTS

- Transformed document processing with a novel server-side asynchronous system using C# Windows Services and integrated seamlessly with MS Office DLLs for dynamic document generation at Buyers Fund.
- Managed a project at Novell; Submitted a patent for a GUI-based system automating build requests, achieving an 85% boost in accuracy and speed. Employed Internationalization and Localization DLLs for seamless global operations.
- Addressed a crucial need by creating a custom call center software that boosted reporting accuracy by 80%, enabling data-driven decisions and optimizing performance.
- Liaised with stakeholders to integrate custom hardware, software, and 3<sup>rd</sup> party solutions, improving data flow.
- Oversaw CRM and CMS systems, eliminating software defects and composing user stories in C# and ASP.NET with SQL Server.

### PROFESSIONAL EXPERIENCE

#### SENIOR SOFTWARE DEVELOPER | SKYMETRIC SOLUTIONS (FULL-TIME, CONTRACT, REMOTE), 2023 – 2024

Lead the design and implementation of complex software solutions, ensuring adherence to coding standards and best practices. Collaborate with cross-functional teams and provide technical guidance to foster a high-performance development environment.

- Headed development of an MVC Razor C# app for Skymetric Solutions, heightening bid pricing and advancing user engagement with a sleek UI. Used Creative Tim SoftUI and Bootstrap 5.3 to build intuitive UI, driving user engagement and workflow.
- Engaged in daily communication through MS Teams/Chat; monitored project progress using DevOps Boards/Kanban and managed code retrieval and submission via GIT/DevOps repository.
- Revitalized client-facing app's aesthetics using Creative Tim SoftUI and Bootstrap 5.3, elevating user experience.

#### TUTOR | WYZANT.COM (ONLINE, 2020 – PRESENT)

Share and teach software development skills on Wyzant.com; guide students in mastering C#, Visual Studio, and database integration for desktop and web applications.

- Facilitated skill development in others while upholding a strong personal commitment to expanding knowledge and staying adaptable in the ever-evolving software development landscape.

- Demonstrated commitment to continuous learning by actively engaging in personal projects and online courses, including recent explorations in React and Python.

**SENIOR SOFTWARE DEVELOPER | AMADEUS (FULL-TIME, REMOTE), 2022 – 2022**

Led end-to-end functions pertaining to designing, developing, and maintaining software applications. Analyzed and troubleshooted intricate issues and proposed effective resolutions with a continuous improvement mindset.

- Demonstrated a commitment to efficiency by optimizing airline booking workflows, resulting in a substantial 20% reduction in booking processing time through strategic utilization of the NewSkies API.
- Deployed daily MS Teams channels that aided in elevating team communication and augmenting overall project progress.
- Steered proactive code analyses, aiding in identification and resolution of critical bugs to prevent potential system outages.

**SENIOR SOFTWARE DEVELOPER | CDCN (FULL-TIME, CONTRACT, REMOTE), 2021 – 2021**

Directed the design and creation of innovative software solutions, ensuring strict adherence to coding standards and specifications. Liaised and functioned closely with cross-functional teams, conducted comprehensive code reviews, and offered technical guidance to promote a high-performance development environment.

- Enabled real-time data access and analysis through successful integration of application's frontend with CosmosDB.
- Enhanced data security by configuring Azure Key Vault, actively observing firewall permissions, and using AzureCLI for script-based automation, guaranteeing sensitive information protection.
- Played a key role in developing C# / ASP.NET application for Home Health Care tracking, resulting in workflow improvements.
- Utilized KendoUI, Angular, and TypeScript to design a dynamic pop-up that improved user interaction and data input accuracy.

**SENIOR SOFTWARE DEVELOPER | XPANXION (FULL-TIME, CONTRACT, REMOTE), 2021 – 2021**

Headed the design, coding, and modification of software applications, while assuring adherence to specifications throughout all development stages. Reviewed code written by other developers to confirm fulfillment of project standards and bug-free. Provided input in daily MS Teams discussions, fostering clear information exchange and alignment on project goals.

- Contributed to developing an energy auditing application, enhancing resource management and cost-efficiency.
- Boosted application performance and maintainability by refactoring ASP.NET webforms and T-SQL using C# code.
- Attained 20% significant increase in project visibility through efficient task management on Monday.com.

**SENIOR SOFTWARE DEVELOPER | TULGY (FULL-TIME, REMOTE), 2020 – 2020**

Developed high-quality software design and architecture as well as prioritized and executed tasks efficiently throughout the software development life cycle. Planned and managed software projects, overseeing task assignments, timelines, and resource allocation.

- Played a key role in designing and developing a robust C# RESTful Web API, allowing smooth integration with an SQL Server database and Salesforce Field Service Lightning objects.
- Innovated internal Salesforce administration and integration practices, boosting functionality and reducing development time.
- Created an efficient user management system for Salesforce accounts, reinforcing security and collaboration through the creation of user accounts and strategic assignment of permission sets for both group and individual access.

**SENIOR SOFTWARE DEVELOPER: BOEING AEROSPACE (FULL-TIME, CONTRACT, ONSITE), 2019 – 2019**

Designed and employed intricate software solutions, guaranteeing strict adherence to coding standards and best practices. Conducted comprehensive code reviews, and offered technical guidance to foster a high-performance development environment.

- Headed C# Windows application development, transforming R&D processes and design collaboration by visualizing airplane wing models in 3D.
- Established a seamless data pipeline linking the C# application to a MongoDB backend, certifying a smooth flow and rapid retrieval of intricate 3D model data.
- Used C# NETZMQ, and TCP/IP to enable real-time communication between the application and a Raspberry Pi, dynamically controlling projectors and cameras for detailed wing inspection.
- Increased data interaction by seamlessly enabling MongoDB access from both web and Windows interfaces, fostering collaborative analysis and decision-making.

## ADDITIONAL EXPERIENCE

### SOFTWARE DEVELOPER AT WEBMASTER (5 YEARS, NON-PROFIT, PRO BONO)

- Developed and maintained a dynamic website for Utah Kids Foundation for 5 years, utilizing HTML, CSS, JavaScript, jQuery, and Bootstrap. Migrated website from IIS to Apache, resulting in cost savings and ensuring long-term platform viability.

### SOFTWARE DEVELOPER AT DEALER SOCKET (2 YEARS)

- Transformed the entire automotive dealership web solution with a C# backend and dynamic front-end using Master Pages, CSS, JavaScript, jQuery, and Bootstrap. Applied Fibonacci estimation to analyze and tailor user stories for efficient implementation and maximum impact.

### SOFTWARE DEVELOPER AT BUYERS FUND (4 YEARS)

- Revitalized document processing with a novell server-side asynchronous system using C# Windows Services. Integrated seamlessly with MS Office DLLs for dynamic document generation. Led and managed the migration of critical data from MS Access to SQL Server tables for long-term accessibility and scalability.

### SOFTWARE DEVELOPER AT NOVELL (1-YEAR INTERNSHIP)

- Submitted a patent for a groundbreaking GUI-based system that automated processes and simplified build requests, resulting in an 85% improvement in accuracy and speed. Implemented advanced Internationalization and Localization DLLs to seamlessly support global operations.

## EDUCATION

**Bachelor of Science – Information Technology**, University of Phoenix

**Certificate in Visual Communications (10 Month Certificate)**

**Udemy (online) Courses:** JavaScript - 70 hours (Completed) | React - 50 hours (Completed) | React Native - 28 hours (in-progress) | Angular - 35 hours (in-progress) | Node - 35 hours (in-progress) | TypeScript - 25 hours (in-progress) | Python - 58 hours (in-progress)

## TECHNICAL PROFICIENCIES

**Programming Languages and Frameworks:** C# | JavaScript | SQL (T-SQL)

**Web Development Technologies:** ASP.NET | .NET Core | Angular | jQuery | CSS | HTML

**Database Management:** SQL Server | Entity Framework | LINQ | SQL Server Management Studio (SSMS) | SQL Server Profiler

**Cloud Platforms:** Microsoft Azure | AWS (Amazon Web Services) | Google Cloud Platform

**Software Development Concepts:** Routing | N-tier Application Architecture | Custom Integration