Kevin Foster

Software Engineer & Healthcare Developer | Transforming Patient Care with Innovative Tech Solutions 🚀 | Leading Teams to Success



Summary

Results-driven software engineering leader with extensive experience driving innovation and delivering high-impact solutions for enterprise-level software operations, development, and training. Expert at navigating the high-stakes demands of healthcare practices across diverse specialties, ensuring seamless integration and optimal performance. Adept at leading cross-functional teams to translate complex business requirements into practical, scalable software solutions. Proven track record of fostering innovation, optimizing software delivery processes, and aligning technology strategies with organizational goals to achieve measurable outcome…

Professional Experience

Senior Software Engineer May 2025 - Present

United Audit Systems, Inc.

Own the architecture, modernization, and operational stability of applications supporting clinical documentation integrity, mid-revenue cycle workflows, and coding compliance. Harden and optimize legacy systems, enhance platform security, and build new data-processing tools that improve workflow efficiency for auditors and coding analysts. Partner across engineering, clinical, and compliance teams to deliver secure, scalable software in a highly regulated healthcare ecosystem.

- Migrated two React applications to cost-efficient Azure resources and implemented automated CI/CD pipelines using Bitbucket, reducing deployment effort and improving reliability.
- Refactored and security-hardened a proof-of-concept web application, transforming it into a stable, maintainable product ready for production use.
- Revitalized a legacy C# application supporting multiple SaaS clients, delivering its first enhancements and bug fixes in more than four years.
- Built an EDI parsing engine for 835 and 837 files in BridgeLink (Mirth Connect fork), enabling faster and more reliable healthcare data ingestion and integration.
- Authored clear, comprehensive documentation for technical implementations and operational workflows, improving team knowledge sharing and onboarding efficiency.

Office of the CTO Jun 2024 - Mar 2025

NextCare Inc.

Collaborated closely with cross-departmental leaders to drive strategic operational projects, ensuring technology initiatives align seamlessly with overarching business objectives and executive vision. Provided high-level strategic support to the C-suite, translating executive priorities into actionable technology solutions and fostering cross-functional collaboration to enhance organizational effectiveness.

- Led key technology projects and initiatives aligned with executive leadership's vision, driving innovation and business growth.
- Facilitated cross-departmental collaboration on technology efforts, breaking down silos to deliver integrated, enterprise-wide solutions.
- Developed thought leadership content and engaged with operational stakeholders to promote technological innovation and industry best practices.
- Provided strategic guidance to ensure technological strategies and implementations supported and advanced overall business objectives.

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Education

Certifications

- **EHR Certified Professional** — *NextGen HealthCare*
- **ICS Certified Professional** — *NextGen HealthCare*

Skills

Artificial Intelligence: AI-assisted software development, Claude, Claude Code, ChatGPT, Codex, GitHub Copilot, Ollama, LiteLLM, Agent workflows, Codex extension for Visual Studio Code, Large Language Models (LLMs), Prompt engineering

Frontend: HTML, SCSS / CSS / Styled Components, Javascript, ReactJS, NextJS, React Native, Android, iOS, Mobile, Ruby on Rails, RoR, C#

Backend: Node, Ruby, Python, NextJS, REST APIs, SOAP APIs, Postgres, MySQL, SQL, SSRS, SSIS

DevOps: Microsoft Azure, Azure Devops, Microsoft Cloud Services, Google Cloud, Continuous Deployment, Continuous Integration, (CI/CD), Git, GitHub, SVN, Agile Methodologies, Scrum

Healthcare: NextGen EHR, NextGen EPM, NextGen ICS, Template Editor, Rosetta, Mirth Connect, NextGen Share, Surescripts, Interoperability, Rebuttals, Clinical Documentation Improvement (CDI), Risk Adjustment Factor Score (RAF)

Soft Skills: Manager, Director, Leader, Innovation, Platform, Engineer, Engineering, Hiring, Retention, Mentor, Prioritization, Cross-collaboration

Tools: SQL Server Management Studio, Visual Studio Code, Visual Studio, Git, TortoiseGit, TortoiseSVN, Microsoft Office Suite, Word, Excel, Outlook, PowerPoint, MSTeams

Director, Application Development Jun 2024 - Mar 2025

NextCare Inc.

Provided technical leadership and strategic oversight for multiple engineering teams, ensuring the successful and timely delivery of software solutions through effective stakeholder collaboration, priority management, and resource allocation. Drove innovation by aligning application development with business objectives and industry best practices.

- Led and managed high-performing application development teams, fostering a culture of continuous improvement, collaboration, and technical excellence.
- Defined and implemented development strategies and standards, enhancing software quality, scalability, and maintainability.
- Collaborated with cross-functional teams to ensure application solutions effectively supported evolving business needs and objectives.
- Oversaw project management processes, ensuring timely delivery of high-quality software through rigorous quality assurance practices.
- Mentored development teams through biweekly one-on-one coaching, promoting professional growth and technical skill development.
- Evaluated and adopted new technologies and methodologies, driving innovation and maintaining a competitive technology edge.
- Managed budgets and resources for application development initiatives, optimizing costs while maintaining project quality and delivery timelines.

Application Development Manager Jun 2019 - Jun 2024

NextCare Inc.

Led and mentored application development teams, ensuring alignment of development projects with business objectives and delivering high-quality software solutions. Provided technical leadership and strategic guidance to enhance team capabilities, foster collaboration, and drive continuous improvement across development processes. Developed and launched a digital front-door app, achieving 300K user adoption.

- Provided technical leadership and advisory support for both onshore and offshore development teams, ensuring alignment with best practices and organizational goals.
- Coordinated weekly cross-department change management meetings, facilitating communication and collaboration across teams to manage and implement software changes effectively.
- Launched the initial release of a patient/customer-facing mobile application, enhancing user experience and expanding service accessibility.
- Steered agile development teams, leading scrum ceremonies and ensuring agile practices supported timely and high-quality software delivery.
- Mentored development teams through biweekly one-on-one coaching, fostering technical growth, career development, and continuous learning.
- Evaluated, selected, and managed relationships with software partners, optimizing technology partnerships to enhance development capabilities and support business goals.
- Delegated tasks strategically, ensuring knowledge transfer and skills development across the team to build a resilient and high-performing engineering organization.

Developer Jul 2010 - Jun 2019

NextCare Inc.

Played a pivotal role in the design, development, and enhancement of NextGen Enterprise applications, leveraging both clinical and IT expertise to deliver high-quality software solutions. Responsible for end-to-end development processes, quality assurance, and continuous improvement of patient user interface templates, ensuring alignment with clinical workflows and business objectives.

- Implemented an agile change management process and introduced a software Kanban solution, improving cross-departmental workflows and change visibility for core business product NextGen Ambulatory.
- Scoped and developed a custom C# application to present critical business information to employees prior to accessing core systems. The application is fully managed by medical operations and training teams, enhancing operational transparency.
- Led weekly planning meetings with medical operations, training, education, and development teams, ensuring coordinated announcements and software deployments across departments.
- Facilitated weekly sprint meetings with the development team, maintaining agile practices and improving sprint planning, execution, and delivery.
- Established and maintained a version-controlled environment integrated with change management processes, ensuring all code check-ins were traceable to specific change requests, enhancing code quality and traceability.
- Designed and built a Ruby on Rails web application to serve as a Master Patient Index, enabling authorized users to search and locate patient information across all business units, addressing a critical organizational need.
- Led the ICD-10 government mandate transition, designing and executing a custom ICD-9 to ICD-10 conversion process, ensuring compliance with regulatory requirements.
- Developed a C# application for automated Crystal Reports delivery, enabling reports to be distributed via email or file export based on scheduled parameters, reducing manual processes and improving data accessibility.
- Utilized SQL Server and Crystal Reports to extract and analyze atypical data requests, supporting departmental audits and data-driven decision-making processes.
- Collaborated on NextGen EHR ACE (formerly Knowledge Base) maintenance, editing and updating templates to ensure accuracy and alignment with evolving clinical practices.
- Mentored junior developers through the 'watch one, do one, teach one' method, providing continuous feedback and fostering skill development:
- - Guided the development of a C# application for simulating electronically received lab and diagnostics results, enhancing clinical staff training scenarios.
- - Introduced professional documentation practices, reinforcing code documentation standards and use case testing methodologies.
- - Advanced SQL skills from basic queries to complex stored procedures, enhancing data analysis and reporting capabilities.
- Conducted peer reviews and formal design reviews, contributing to robust software quality assurance and release processes.
- Remediated security audit findings, addressing vulnerabilities and enhancing application security posture in compliance with industry standards.
- Integrated medical claims clearinghouse with core practice management software, utilizing secure FTP protocols to ensure reliable and secure data exchange.
- Developed interfaces with laboratory, radiology, and insurance systems using TCP/IP, SOAP, and HTTPS protocols, enabling structured data transmission for demographics, orders, and results.
- Created a custom C# tool for IT support to resolve recurring licensing issues, enhancing user access to NextGen software and reducing downtime.
- Participated in beta testing of new features with advanced end users, providing valuable feedback to inform software enhancements and user experience improvements.

Product Developer Dec 2009 - May 2010

InforMed / SergeMD

Sole developer responsible for designing, developing, and deploying web applications that integrated seamlessly with existing customer software services, enhancing healthcare communication and administrative processes. Delivered enterprise-level solutions that improved patient-provider interactions and streamlined administrative oversight.

- Designed an enterprise web solution for healthcare facilities, enabling secure messaging between medical providers and patients, improving communication efficiency and patient engagement.
- Developed a web application for administrative monitoring, providing a centralized interface for tracking system and application usage and ensuring secure, single-point access for administrative oversight.
- Defined and managed project milestones in alignment with statement of work agreements, ensuring timely and successful project delivery.
- Operated within a version control infrastructure, maintaining code integrity and facilitating efficient development practices.
- Initiated and conducted internal product demonstrations for stakeholders, equipping them with the knowledge to support and effectively leverage value-added features and functionalities.

Software Developer Feb 2007 - Dec 2009

InforMed / SergeMD

Developed and maintained NextGen templates and Crystal Reports, enhanced system functionality through SQL stored procedures, performed software upgrades and migrations, and managed client communications regarding software changes. Played a key role in improving system performance, client satisfaction, and operational efficiency.

- Provided top-level, application-specific technical support, resolving complex issues and ensuring high levels of client satisfaction.
- Defined and implemented a process for tracking customer contract utilization, enabling additional revenue generation when development efforts exceeded standard scopes.
- Performed client-contracted quarterly and billable development tasks, delivering high-quality software enhancements in alignment with client needs.
- Designed a SQL job to notify support staff of abnormal application operations, automating a previously manual daily task that involved monitoring up to six applications across 12 servers, significantly reducing support workload.
- Updated software with current versions of ICD-9, CPT-4, patient education, medication, allergy, and drug interaction tables, ensuring compliance with industry standards and enhancing patient care.
- Scheduled and performed routine software maintenance rollouts, maintaining system reliability and minimizing downtime.
- Performed KBM upgrades, patches, and template set conversions, keeping practice templates up-to-date and aligned with clinical requirements.
- Led the implementation of interfaces between NextGen and third-party systems, including reference labs, radiology vendors, and EKG equipment, reducing staffing needs and eliminating manual data entry requirements.
- Communicated effectively with all levels of end users, including front desk staff, administrators, nursing staff, and providers, ensuring clear and effective software usage and support.
- Authored content for the corporate website, promoting the department’s professional services and enhancing the organization’s visibility and reputation in the market.

Technical Support Jun 2006 - Feb 2007

InforMed / SergeMD

Provided Level 1 technical support for enterprise computer systems and networks, ensuring system reliability and customer satisfaction. Installed, configured, and troubleshooted hardware and software issues, serving as a critical support resource for clients.

- Served as the primary point of contact for customers, delivering prompt and effective technical support while maintaining high levels of customer satisfaction.
- Defined and documented support procedures, publishing processes to the corporate repository, standardizing support practices across the organization.
- Recorded and tracked customer issues using corporate issue tracking software, ensuring accurate documentation and timely resolution.
- Coordinated communications between customers and third-party vendors, facilitating efficient issue resolution and vendor support.
- Managed on-call technical support services after office hours, providing critical support and minimizing system downtime.
- Administered Active Directory, creating and maintaining user profiles and resolving password issues, ensuring secure and efficient user access.
- Remotely managed application servers running critical background processes, maintaining system performance and reliability.
- Conducted site surveys to inventory client hardware, supporting accurate asset management and future technology planning.

Computer Engineering Sep 2001 - Jun 2006

Focus on Computer Science and Embedded Systems

Completed extensive coursework in computer science and embedded systems, gaining hands-on experience in systems programming, software development, and hardware integration. Participated in advanced projects that combined software and hardware solutions for real-world applications.

- Defense Department Contract Software Development (MATLAB): Collaborated with a graduate-level study team to design a software system for border patrol use, enabling the identification of shipping vessels. The project involved advanced algorithm development and MATLAB programming.
- Traffic Simulation System (Assembly & FPGA): Designed and manufactured a small-scale traffic simulation using assembly language. Programmed and burned instructions to FPGA ROM, integrating with circuit board controls to simulate real-world traffic scenarios.
- Systems Programming (C/C++): Completed coursework focused on systems programming in C/C++, utilizing custom public libraries developed by the course professor to build robust and efficient software solutions.

Projects

RAFVue

RAFVue is a risk-adjustment and coding compliance platform designed to help healthcare organizations improve coding accuracy, optimize risk adjustment factor (RAF) scoring, and streamline mid-revenue cycle audit workflows. The application empowers coding teams, auditors, and healthcare organizations to identify documentation gaps, validate coding accuracy, and support compliant clinical documentation integrity initiatives. It integrates advanced data ingestion, quality review workflows, and actionable analytics to deliver a complete, end-to-end coding audit experience.

- Built EDI ingestion pipelines: Designed and developed an 837 and 835 file parsing engine to power initial data ingestion for coding audits. This automated the extraction of encounter, claim, and payment data, enabling auditors to quickly initiate reviews with clean, structured inputs.
- Optimized and modernized backend SQL logic: Refactored complex SQL functions, views, and queries to be DRY, reusable, and highly performant —improving load times and reducing redundant logic across the platform.
- Modernized authentication and authorization: Migrated the application's authentication model from legacy user/password tables to Microsoft Entra External ID, strengthening security, enabling SSO, and aligning with enterprise identity standards.
- Implemented a saved search feature allowing auditors to quickly reload frequently used patient search filters.
- Built a templating system for generating coding audit communication forms, improving consistency and reducing manual work.
- Added a pseudo-Elasticsearch mechanism for large structured datasets (e.g., diagnosis code dropdowns), significantly improving lookup speed and user experience.

SureClaim

Sureclaim is an audit rebuttal management platform that facilitates structured, compliant communication between clinical auditors and healthcare organization leadership. After an audit is completed, healthcare providers can review findings, submit rebuttals, and collaborate with auditors and supervisory teams through an organized, trackable workflow. The system improves transparency, turnaround time, and documentation accuracy in the audit resolution process.

- Modernized authentication architecture: Migrated the system from a legacy username/password model to the enterprise-wide Microsoft Entra External ID setup shared with RAFVue—strengthening security, simplifying onboarding, and unifying identity management across applications.
- Performed a full security review and refactor: Conducted an in-depth audit of the codebase (originally implementation-heavy with minimal structure), refactored core components, and resolved major security issues. This included overhauling backend authorization rules to ensure strict tenant scoping and preventing cross-client data exposure.
- Delivered collaboration-enhancing features: Built a robust commenting system with @mentions, enabling users to tag colleagues and trigger relevant notifications during the rebuttal workflow.
- Added personalized notification capabilities: Implemented user-configurable email alerts for key system events—helping supervisors and reviewers stay informed without manual monitoring.
- Integrated external data systems: Connected Sureclaim with Quickbase to seamlessly pull client profiles, project metadata, and rebuttal details, ensuring consistent, up-to-date information across systems.

EDW User Upload

The EDW Upload Site is a self-service portal that streamlines how internal teams provide source data to the enterprise data warehouse (EDW). Previously, users emailed files directly to engineering leadership, requiring manual placement into specific Azure storage locations for Data Factory pipelines. This manual workflow created bottlenecks, delays, and inconsistent handoffs. The new platform automates the entire intake process, enabling authorized users to securely upload files while the system validates, routes, and monitors the ingestion pipeline.

- Automated a formerly manual file-loading process - Designed and built the full upload portal, allowing users from HR, Finance, and other departments to submit files directly. The system automatically identifies data types and routes them to the correct Azure storage container for downstream ADF processing.
- Implemented authentication with the existing domain tenant - Leveraged Microsoft Entra ID for authentication, ensuring all users log in through existing organizational credentials with no additional account management overhead.
- Added granular authorization controls - Built role- and group-based authorization rules to ensure only permitted users could upload specific file types—strengthening security and reducing accidental misuse.
- Introduced staged upload workflow - Implemented guardrails so that certain files (e.g., HR uploads) must be submitted before subsequent departments (e.g., Finance) can upload theirs, ensuring data pipelines run in the correct order.
- Provided real-time ingestion status - Built dynamic upload and processing indicators that reflect the current ADF pipeline status, giving users visibility into the ingestion process without needing engineering support.
- User enablement & training - Delivered hands-on training sessions for HR, Finance, and operational teams, ensuring smooth adoption and empowering users to independently manage their own uploads.

This Resume

A purposeful project with the goal of creating an easily maintainable, yet highly adaptable categorization of my overall corporate experience...

- Format all resume data in a structured manner consistent with JSON Resume schema
- Provide direct links to it from my personal portfolio website
- Seamlessly integrate the JSON data into a fully autonomous system, allowing changes to tracked in source control, processed by a CI/CD pipeline, deployed to all necessary backend systems.
- Craft the content with the assistance of AI technology (ChatGPT) to enhance clarity and impact.

iNag

A tongue in cheek named program that was designed as an announcement gateway into the electronic health record system.

- The primary goal of the application was to act as an additional communication tool between end users and administrative staff to ensure acknowledgement of announcements.
- The tool allowed administrators or operational leaders to present users with relevant information in PDF format, and then track each users' receipt.

Crystal Report Delivery

This application allows delivery of Crystal Reports by either Email or File export either directly, or scheduled through NextGen's Background Business Processor.

- Enable the means to securely send Crystal Reports without exposing credentials by either processing by delegation or through encrypted credentials.
- Configure report delivery details by report through a human readable XML Schema.
- Enable built in error log review, or emitting to notification systems.

Wordle Clone

This is a clone of the viral puzzle game, created by Josh Wardle, and now published daily by the New York Times.

- Use a predefined wordlist, randomly select a valid and guessable puzzle for the user to solve.
- Provide hints to the user after each guess based on character location and correctness.
- Celebrate a successful puzzle solution.

Client Information Form

An enterprise resource planning utility for tracking all B2B contracts and service agreement details.

- Facilitated the conversion from a paper tracked process to a fully electronic system.
- Systematically ingested legacy paper forms using OCR and image scanning to migrate into the electronic system.
- Enabled revision tracking for individual business form changes with a managed approval system.
- Embedded form functionality in the enterprise medical health record system allowing for automating payment adjustments and restricting services to allowables in the B2B agreement.

Awards

Panelist for Inaugural NextGen Excellence in Healthcare Awards 2021

Awarded by NextGen HealthCare

Finalist, Client Innovation Contest (multiple)

Awarded by NextGen HealthCare

Client Innovation Contest Winner (2018)

Awarded by NextGen HealthCare

Time magazine's Person of the Year 2006

Awarded by Time magazine