

Senior Software Engineer

Seasoned professional with extensive experience in developing specifications, designing systems, and resolving complex technical problems. Proven track record of creating software applications, integrating software components, and leveraging agile methodologies such as Scrum, Three Amigos, XP, and Kanban. Instrumental in leading migration of referrals, maintaining data/REST APIs, ensuring system availability/reliability, and streamlining development procedures. Well-versed in managing development teams, driving strategic initiatives, fostering strong client relationships, and enhancing user experiences. Skilled in composing code using appropriate programming languages and frameworks, and guaranteeing that code is maintainable, well-documented, and adheres to industry best practices. Adept, adopting new technologies to modernise technology stacks, amplifying system efficiency, and scalability, boosting corporate revenue/profitability, and delivering innovative software solutions. Excel at implementing automated pipelines within Azure DevOps, establishing robust CI/CD automation infrastructure, leading to a significant reduction in cycle time by double-digit percentages, and maximising productivity. Experience in gathering/translating client requirements, IoT and Machine Learning applications, creating/implementing wireframes/mock-ups specialising in desktop applications.

Area of Expertise

- Strategic Planning & Execution
- DevOps, CI/CD & UI/UX Design
- System Architecture & Design
- Performance & Process Optimisation
- Project Management
- Team Building & Leadership
- Risk Assessment & Mitigation
- Troubleshooting & Debugging
- Software Development Lifecycle
- API Development & Integration
- Coaching & Mentoring
- Cross-functional Collaboration

Technical Proficiencies

- Languages: Rust | C++ | Python | Java | Kotlin | Swift | JavaScript | C#
- Frameworks and Libraries: ASP.NET Core | .NET Core | MAUI | Xamarin.Forms | Microsoft ML | Tensorflow | Rx.Net

Career Experience

Senior Software Engineer, Blackfinch, Gloucester

2024 – Ongoing

Provided technical leadership and hands-on development expertise within an agile team. Collaborated across teams to deliver robust, secure and scalable solutions for the Nest's application loans and ventures with microservices pattern.

- Mentoring and coaching junior developers, enforcing best practices in software development
- Ensuring high quality code through code reviews by implementing an always refactor with new pull requests as well as helping implement test-driven development
- Assisted in architecting and setting up a new project for pensions

Senior Software Engineer, Pina Vida, Edinburgh

2023 – 2023

Led migration of Referrals, an integrated workflow system for diamond analysis hardware, from .NET Core 3.1 to .NET 7 while certifying high availability and optimised performance during migration process. Developed Python scripts to execute complex algorithms, contributing to system's analytical capabilities. Partnered closely with cross-functional teams using Scrum and Three Amigos-style planned sessions to align Referrals with diverse needs of stakeholders.

- Employed event-driven programming using Rx.NET to boost real-time data processing and improve system responsiveness.
- Integrated various embedded hardware components, such as diamond analysis hardware and NFC card readers, into Referral system, broadening capabilities.
- Implemented critical features for system, including microservices, using C#, WPF, Angular, CosmosDB, and Azure DevOps Pipelines, enhancing system functionality.
- Led comprehensive implementation of four out of eight distinct microservices.

Senior Software Engineer, Dyneval, Edinburgh

2021 – 2023

Orchestrate end-to-end design and execution of technical solutions aligning seamlessly with customer specifications, leading to enhanced customer satisfaction and retention. Collaborate closely with CEO and CTO, fostering efficient communication channels to

facilitate smooth progression of technical projects, ensuring alignment with organisational goals and objectives. Streamline development process by implementing automated pipelines within Azure DevOps, enabling efficient code testing and benchmarking. Mentor and guide junior developers, nurturing professional growth and increasing team cohesion. Craft top-notch training materials and deliver training sessions to users, empowering clients in deploying/using products effectively. Guided and mentored junior developers, fostering growth and instilling best practices in software development.

- Strengthened development unit and facilitated project scalability by recruiting, interviewing, and onboarding three junior developers, two mid-level developers and software manager.
- Achieved 80% performance boost by reducing hot path processing time from 5 minutes to just 1 minute, and maximising user experience and operational efficiency.
- Augmented revenue streams by heading transformation of product from proof of concept to full-scale production launch, resulting in widespread adoption by over 100+ customers.
- Guaranteed full compliance with data protection regulations, fortified data security measures, and mitigated potential legal risks associated with product by employing stringent GDPR software standards.
- Spearheaded development of a comprehensive solution, combining a WPF desktop app (C#.NET, XAML), React website, mobile app (Xamarin.Forms), and an Asp.net Core API on AWS. Implemented complex mathematical algorithms for fertility sample quality assessment, enhancing accuracy and efficiency.

Mobile Engineer, McDermott Group, Glasgow

2019 – 2021

Directed Xamarin.Forms mobile developer within dynamic team of 15 developers, cultivating collaboration and synergy in SCRUM environment managed through Azure DevOps and MS Teams. Connected closely with cross-functional teams including frontend, mobile, data, and design, assuring seamless coordination across various projects. Provided guidance and leadership to mobile development team, steering efforts towards successful and timely delivery of projects. Facilitated informed decision-making and refined project execution by actively engaging in sprint reviews and meetings, contributing valuable project updates/insights.

- Revitalised and automated deployment cycle by executing DevOps pipelines, amplifying efficiency/reducing manual intervention.
- Played pivotal role in development and architecture of mobile module for Chameleon Vision, project with central focus on both Machine Learning and IoT innovation.
- Elevated workflow and advanced project progression by overseeing mobile team backlog management and task prioritisation, confirming optimal utilisation of resources.

Junior Software Developer, Consulence, Skåne

2017 – 2019

Tackled diverse array of projects in C# as outsourced consultant, ranging from medical technology desktop development using WPF fin-tech development with Angular and e-commerce with Xamarin.Forms.

Educations

Bachelor of Science in Software Development for Business, Software Development for Business, Glasgow

2019 – 2022

Certifications

Microsoft Certified: Azure Fundamentals, AZ-900, 2023 | Microsoft Certified: Foundational C#, 2023

Key Projects

Senior Software Engineer, Referrals Migrations | Pina Vida, 2023: Upgraded Referrals system from .NET Core 3.1 to .NET 7 to assure compatibility with latest technologies and improve performance. Integrated Referrals with eight different types of diamond analysis hardware, treating each piece of hardware as a microservice for easy management and maintenance. Implemented WPF framework for user interface, following MVVM architecture for a structured and maintainable UI. Designed and implemented user interfaces for both WPF and Angular components, focusing on creating intuitive and user-friendly interfaces to enhance overall user experience.

- Maximized system responsiveness/real-time capabilities by employing Rx.Net to handle asynchronous/event-driven programming.
- Architected Referrals system as microservices project, with each piece of diamond analysis hardware represented as an individual service, enhancing scalability and flexibility.
- Established software solutions integrating C#, .NET 7, WPF, Angular, CosmosDB, Azure DevOps Pipelines, and Python for enhanced functionality and streamlined development.

Senior Software Engineer, DyneScan | Dyneval, 2023: Led a team of three developers to launch DyneScan, an innovative product for an agricultural startup, utilizing computer vision and machine learning for livestock semen analysis. Implemented automated error reporting with Sentry and telemetry for gathering user behaviour and performance metrics, enhancing product's reliability /user experience. Leveraged Nlog for logging, providing comprehensive visibility into application's behaviour/issues. Ensured product security by using Auth0 service to secure API gateway. Deployed AWS MariaSQL for cloud database and SQLite for local database, certifying data management flexibility and scalability.

- Developed wireframes and mock-ups for various UI pages, tailoring user interface to meet specific user needs and usability standards.
- Designed and implemented an ASP.NET Core API to abstract core product functionality and ensure efficient communication between desktop and web platforms.
- Engineered DyneScan as a vertical slice project, using WPF on .NET 6 for desktop application, mobile app (Xamarin.Forms) and React for web platform, guaranteeing seamless cross-platform user experience.

Mobile Lead, Fire & Rescue | McDermott Group, 2019: Monitored migration project to convert native Java applications into cross-platform solutions using C# Xamarin.Forms, optimising code efficiency and reducing development overhead. Functioned as sole mobile developer within diverse team of 16 professionals, encompassing testers, backend, and frontend, fostering collaboration and knowledge sharing. Leveraged Azure DevOps to establish a robust pipeline for building, releasing, and distributing mobile applications, streamlining development and deployment processes as well as utilised Agile methodologies to ensure efficient project management.

- Developed mobile application using MVVM framework with Shell for navigation, optimising code structure and maintainability.
- Integrated app with microservices-based RESTful API architecture, enabling seamless communication and data exchange between various components of system.
- Implemented key features within app, including push notifications, authentication through IdentityServer4, and dependency injection, enhancing user engagement and security.

Machine Learning Developer, WPF Developer, DevOps, Chameleon Detect | McDermott Group, 2019 – 2021: Strategised and executed creation of brand-new IoT machine learning system, starting from scratch by collaborating closely with data science team. Leveraged an array of IP cameras installed across multiple remote sites as data sources, enabling formulation of an innovative automated safety alert system.

- Played pivotal role in bridging gap between technical development and data science, guaranteeing seamless integration and functionality of machine learning system.
- Contributed to system design and implementation, maximising client safety by providing real-time automated alerts based on sophisticated machine learning algorithms.
- Leveraged powerful toolkits including Visual Studio 2022, SQLite, SQL Server, Xamarin, MAUI, Azure/Azure DevOps, Zeplin, Visual Studio 2019, Microsoft ML, Tensorflow, and Rust to drive project success.

Lead developer, GearsMarket (KGA), Gears & KGA | Consulence, 2018 – 2019: Headed Shopping Project catering to customers and salespeople, enabling purchase of perfume products and facilitating support for travelling sellers associated with Kenneth Green Associations (UK). Orchestrated development of an application equipped with offline capabilities, supporting seamless operation, and featuring sophisticated synchronisation system to update data whenever Wi-Fi connection is available. Released application on Google Play Store/Apple App Store, granting widespread accessibility to users on Android and iOS platforms.

- Managed mobile database using SQLite, employed Xamarin Forms for cross-platform development across Android, iOS, and UWP, and developed a robust API using .NET Core to facilitate communication with KGA database.
- Implemented comprehensive feature set, including handling of pictures, videos, sales history, multiple shopping carts, impersonation of customers for salespeople, contact management, brand management, and various user login types.
- Utilised Visual Studio 2019, Xamarin.Forms, XAML, and MVVM architecture to craft robust/user-friendly mobile applications.

Lead Developer, Sony SmartBand 2, Region Skåne| Consulence, 2017: Responded to discontinuation of life-log API by Sony, devising proactive solution to enable continued extraction of user data from SonySmartBand2. Designed and established platform-specific solutions for both Android and iOS, leveraging Android Studio with Java and XCode with Swift to validate seamless data extraction. Executed integration of Google Fitness API and Health Kit API into Android and iOS solutions, enabling retrieval of user data.

- Created a custom API to receive and process extracted data, subsequently storing it in an Azure Server hosted on Amazon Web Services (AWS).
- Augmented project's functionality by developing a website, allowing users to access, visualise, and analyse data through interactive graphs and information displays.
- Leveraged diverse technology stacks including Android Studio with Java, XCode with Swift, SQL Server, Azure Server, .NET Core, AWS, HTML, CSS, and JavaScript to formulate comprehensive solutions for data extraction, storage, and visualisation.