Experienced C# consultant

Ross Fruen | British citizen | Basingstoke

A quality driven, agile, software developer with over 30 years' experience of designing and creating solutions within the Microsoft ecosphere, the first decade in C++ and later C# with a pragmatic approach to BDD, DRY, SOLID, TDD, etc. Working in diverse industry sectors within varied team sizes has engendered the ability to quickly integrate with new environments and assimilate their underlying business drivers. These attributes coupled with the discipline to deliver solo projects and an ability to both cooperate and share knowledge with others will provide positive results for your project.

Flexible on contract duration from single days to multiple years, an average being 14 months with 2 extensions.

Skills

Collaboration	Azure DevOps, CruiseControl, CVS, Git, Mercurial, Rational Synergy, Source Safe, SVN, TFVC, TeamCity, VSTS	**Cloud**	AWS API Gateway, Cloud Formation, Cognito, DynamoDB, IAM, Lambda, QuickSight, RDS, S3, SES, SNS, SQS, Step Functions Azure Functions, Message Bus, Monitoring
Frameworks	Angular, ASP.Net MVC, Bootstrap, Flutter, Ionic, RxJS	**Programming**	C#, C++, Dart, JavaScript, TypeScript
Storage	Dapper, EF, Elastic, DynamoDB, IndexedDB, MySQL, Oracle, SQL Server	**Testing**	BDD, Jest, Jasmine, MSTest, NSubstitute, NUnit, Specflow, TDD, XUnit

MCP in ASP.NET, WCF, .NET Framework, C#, VC++ 6, Windows Architecture I and WOSA I.
BSc (Hons.) 2:1 in Computer Science from Portsmouth University.   Full, clean driving license.

Experience

Q-Bot, London (remote)	C# contractor	February 2023 to August 2024 (2 extensions)

Skills Angular, AWS API Gateway / Athena / CloudFormation / Cognito / DynamoDB / IAM / Lambda / QuickSight / S3 / SES / SNS / SQS / Step Functions, Azure DevOps, C# 13.0, Docker, Git, NET Core 6, Python, RxJS, Typescript, xUnit

Introduction of QuickSight reporting and migration of Ionic website to new Angular front end using dockerised C# lambdas for the back end. Work areas included:

- Creation of ETL to S3 from disparate sources (DynamoDB via Glue, Salesforce and Stripe using AppFlow, Xero through make.com) and exposure via Athena for use as QuickSight datasets. Generation of QuickSight Analyses for reporting
- Creation of standardised CI/CD pipeline to build lambdas, analyse with SonarCloud, dockerise and push to AWS ECR before executing Cloud Formation scripts for the services AWS needs (dynamo, lambda, S3, etc.)
- Refactoring and simplification of existing C# lambdas. New lambda functionality developed in Python.
- Angular website with routing to allow deep linking to property, survey and install details from QuickSight.
- Use of Step Functions for ETL between legacy and new system. Python scripts for obfuscation, copying S3 assets, etc.
- Automated generation of deltas for Energy Performance Certificates and their importation into DynamoDB

EMR, Warrington (remote)	Contract developer	August 2022 to February 2023

Skills Angular, Azure MessageBus / SQL, C# 8.0, Dart, Entity Framework, Flutter, Git, Jasmine, MSTest, .NET 6, Typescript

Extending functionality of Angular and Flutter based websites used to record purchases, sales and perform operational planning for metal recycling centres. Work areas included:

- Addition of new features to Angular app and C# back end that managed routes to market for stock
- Extension of existing Flutter based tool to track stock levels
- Migration and refactoring of existing stand-alone Flutter application into a new common corporate framework
- Report generation using EPPlus (for Excel) and QuestPDF
- Introduction of queue and event driven architecture for transport booking

BBC, IBM, ICL, LexisNexis, Nokia, Royal Mail, Sony, Vertu, etc.	Contract developer	July 1992 to July 2022

Skills ADO, Ajax, Angular, ASP, Aspose, ATL, Autodesk, AutoMapper, AWS API Gateway / DynamoDB / Lambda / S3 / SES / SNS / SQS, Azure DevOps / Functions / MessageBus, C, C#, Castle Windsor, CodeDom, COM+, C++, CTI, DAP, Dapper, DHTML, DRM, Entity Framework, Frisby, FXCop, Git, Hg, Ionic, Jasmine, Jira, jQuery, LDAP, MFC, MQ, MSMQ, MSTest, MVC, Net Core, NHibernate, NSubstitute, NUnit, OpenXML, Oracle 10g, OWIN, RxJS, SagePay, SandCastle, SignalR,

Sitecore, SOAP, SQL Server, SSRS, STL, TCP, TeamCity, Telerik, TFS, TypeScript, UML, VB.NET, VSTO, VSTS, WCF, WebForms, Win32, WinForms, WiX, WPF, WWF, XML, XSLT, xUnit

- Creation of Ionic website and micro services for management of a robot fleet. Generation of Azure DevOps CI/CD pipelines with Jasmine, xUnit, SonarQube for QC. Lambdas written in C#. Report generation via OpenXML and Kibana. Offline website support via RxJS, IndexedDB and service workers. Integration with Xero to raise quotes and invoices.
- Created SaaS based flight management system for Gama Aviation using Azure hosted .NET Core micro services with Angular 7 front-end. Intra-service comms via Storage Bus. Creation of SignalR based chat tool. Invoice processing system generating GemBox based reports prior to Sage import. Database schema design and optimisation. EF based tool for migration from Sybase to Azure SQL. Creation of Azure DevOps CI/CD pipeline. Code reviews and mentoring.
- Slashed editorial costs by creating centralised taxonomy service for LexisNexis. CI facilitated by VSTS, SonarQube, Specflow, MSTest and NSubstitute. Unity DI for testing. Resolved build stability issues with ProGet. New Relic reporting.
- Improved revenue flow from blood analyte testing system by introducing individual subscription periods. Data entry through ASP.NET, administration via WinForms. Liaison with end-users to fully understand updates. Addition of SagePay. Created new and revised existing SSRS definitions. Updated database schema and associated CSLA code.
- Created new source of income for Giant by allowing sale of time recording services to agencies. Website generated in Iron Speed. SagePay for subscriptions collection. Management reports through RDLC. Development of database schema. Automated database and website update tool.
- Satisfied Mid Staffs recommendations with anonymous feedback system for healthcare professionals. WPF client (delivered by ClickOnce) and ASP.NET MVC web site collected data. RESTful web service and tamper proof database securely stored concerns with confirmation messages sent via SMS.
- Extended Workflow Activity Library to communicate with a new insurance broker web service. Modified WWF used by GHG Loss Adjusters to use this new functionality.
- Customised SSI management system to meet requirements of specific financial institutions (such as Barclays and Credit Suisse). Wrote functional and task specifications, mentoring and code reviews for offshore developers, generated coded server-side WWF rules, extended WinForm custom controls, resolved UAT issues, modified proprietary ORM, optimised database, analysed and fixed WebSphere MQ 7.1 connectivity issues.
- Built new consumer website for Magnet with Sitecore. CMS extended to analyse user data from external database. Integration with third-party services; SAP, 20-20 kitchen design, Kayako Engage LiveChat, Postcode Anywhere.
- Development of Sitecore website for HSBC promoting opportunities in Emerging Markets. Reference point for integration with Thomson Reuters data feed (TRIS). Worked on site capacity plans.
- Realised BOM system used by Sony when specifying outside broadcasting units. Creation of VSTO Excel add-in utilising Sharepoint and Salesforce.com, maintained installer, created SSRS definitions, produced XLS data import tool.
- Creation of Excel add-in using VSTO and system services to check, summarise and distribute sales results to Sony management reporting systems. Production of supporting database schema.
- Enhancement of system capturing and organising emergency service calls and video recordings. Support for IPv6, fixed database threading / locking issues, added anti-tampering mechanisms, multi-threaded test harness to simulate concurrent requests, new admin functionality requiring updates to schema, server components and WinForm client.
- Design and develop WCF based RESTful web service secured by 2-way SSL to record purchases from O2 app store and generate reports from which developer payments were made.
- Produce system for Vertu to record phone manufacture, register customers and send information to third parties. Authentication via OpenLDAP. Implement ASP.NET support and customer web sites. Generated XSD describing SOAP interfaces. Produced XSLTs to map internal XML structures to external variants. Introduced CruiseControl.NET. Improved database performance and resolved deadlocks.
- Production in C# of mobile phone test system for Nokia. WWF Tests linked to a class framework simplifying common tasks, such as Audio capture, FFT analysis, DRM, OCR, error handling, memory leak analysis and report generation.
- Created multi-threaded server that processed digital dictation work flows and disseminated results to typists. Client authentication via NTLM or Active Directory. Design, develop and tune SQL Server schema.
- Designed and wrote Windows Media DRM system for use by both the BBC and their customers. For resilience the system was hosted within a load balanced web-farm with session data stored in a clustered SQL Server database.
- Creation of cross-platform (HP-UX, Windows 2000) isolation layer insulating Royal Mail from MQSeries.
- Part of team creating assured message delivery mechanism (MQSeries) for Windows from initial UNIX port to version 5.2. Activities included the provision of system services, exploitation of event logs, bridging the MQ and Win32 security models, provision of COM interfaces (MQAI), support for MSCS, integration with Active Directory and LDAP, XML based configuration. Third-line support entailing discussion with customers and support staff worldwide.
- Production of multi-threaded financial data feed server which disseminated data from ISDN and satellite to workstations. Acted as reference point for data feed handling. Liaison with feed suppliers and LSE