

Curriculum Vitae

Personal Details

Name:

Craig Wardman BSc. Hons

DOB:

07-May-1984

Nationality:

English, British



Key Skills

Software & System Architecture

I have a great understanding of **software & system architectures** and their concepts and benefits, at a technology agnostic level. This allows me to design elegant solutions using known technologies and to quickly pick up new paradigms as technologies/implementations evolve.

In terms of software architecture, I am comfortable designing and building applications using **multi-tier architectures** such as **n-tier** or **onion** architecture. I work with “clean code” in mind to create testable/reusable/maintainable code, employing the techniques of **OOP & SOLID principles** and applying **design patterns** to solve problems in familiar ways. I tend to use the principles of **Domain Driven Design** such as **domain modelling, bounded contexts, repository pattern, CQRS** etc.

In terms of **system architecture**, I have designed and built large multifaceted applications by employing the use of both **distributed microservice & event driven architectures**. During my career I have designed/built/deployed systems onto purely **Azure PaaS** environments as well as traditional data-centre/VM environments and also containerized environments such as **Docker & Kubernetes**.

.NET

I have been working in **.NET** for pretty much my entire career, starting with **.NET Framework** and then moving to **.NET Core** and **.NET 5**. Working using **C#** against the **Microsoft development stack** is my natural habitat and is where I can really excel with my approach to problem solving, whilst reflexively adhering to clean coding standards. Over the years I have been involved in many **performance** tuning efforts so I have an eye for creating optimised code where performance is a necessity (such as carefully choosing/refining algorithms, using **dotTrace** to inspect code performance, using **parallel code/threading/AKKA.NET** and using **asynchronous programming**).

Full Stack Web Development

The majority of the work I do is in the sphere of web based applications. I have used Microsoft **ASP.NET** as the back-end technology for many projects, including creating both **RESTful** or **RPC APIs** and for serving web pages using **MVC/Razor**. In the past I have also used **Web Forms**. I have a long historical knowledge of **HTML/JavaScript/CSS**, I have created **mobile-responsive** websites using **Bootstrap** and I like to keep up to date with the latest JavaScript frameworks such as **Vue.js** and **React** using both **SPA** and **MPA** approaches and using front-end paradigms such as **Vuex/Redux**.

... →

Cloud / Containers

I have extensively used the **Azure** platform to design, develop and deploy large **PaaS cloud environments** including; management/creation of resource groups, management/creation of applications/credentials, budgeting using Azure price calculator, managing Azure DNS, management and provisioning of PaaS components such as **Azure Web Apps, App Insights, Azure Search, Redis Cache, SQL Azure, Azure Active Directory, CosmosDB, Azure Data Factory, Azure Storage** and others. I have designed cloud architectures and integrated .net5 code with many **AWS** components such as **S3, SNS, SQS, DocumentDB** and I am familiar with **AWS** concepts. I also have experience in creating and deploying containerized applications using **Docker, Kubernetes & Helm** both on-prem and in the cloud.

SQL

I have extensive knowledge of creating and maintaining databases in **Microsoft SQL Server**, including creating users, roles, tables, indexes, stored procedures and setting permissions. I have knowledge of using simple and complex SQL statements, both DDL and DML. Having been interested in the **performance tuning** aspects of MS-SQL I have learned a great deal on how to optimize databases and related code.

NoSQL

Storing data in other mediums than a relational database has become more and more common practice. I have used several different technologies and serialization systems for this purpose, such as **CosmosDB, Redis, Kafka** etc. using **JSON, ProtoBuf, Avro** etc.

CI/CD

I have been involved on several occasions with defining and creating a **Continuous Integration, Continuous Deployment** pipelines for automated testing/deployment of code. This includes creating **Git** repositories, managing **branching strategies**, establishing a **build pipeline** (using **TFS/Azure DevOps/Docker/Helm/GitLab/Terraform**) creating and running **automated tests** and establishing **deployment pipelines** with approval routes.

Misc

- Developer tooling - Visual Studio, VS Code, NPM, NuGet, TFS/Git etc.
- Agile methodologies - SCRUM, Kanban etc.
- Automated testing - Unit testing, SpecFlow etc.

Work Experience

Apr 2020 - Present (Shelby Finance Ltd - Contract [extended])

Working as a **contract software development consultant** to assist the client in on-boarding a new back end management system and re-writing of their customer facing website to support the updated user journeys and process flows. The first part of the project was to understand the current systems and new business requirements to help to design an **architecture** which would cater to the new requirements with minimal disruption to the live systems and to create a layer of abstraction between the back end and front end systems for future proofing. Based on these designs I then provided **software development** services using **ASP.NET Core** and **SQL** to deliver the “middle-tier” **APIs** necessary to accomplish the desired result as well as providing support in the go-live/migration process.

Following the success of the initial project, a subsequent contract was to perform a similar transition for another arm of the business, this time using **.NET 5** and **AWS** cloud infrastructure to support a **React Native** mobile app, using an event driven microservice architecture. I also worked alongside the platform operations manager to design and build a **GitOps** workflow using **GitLab, Terraform** and **Helm**.

Feb 2018 – Mar 2020 (Jet2 – Contract [extended])

Working as a **contract .NET developer** to assist in the expansion of decentralised microservices to enhance or add functionality on the Jet2Holidays website during the “responsive” rewrite phase, using **ASP.NET WebAPI (C#), Sitecore CMS and Vue.js**. The second contract in succession for Jet2 was working on a new high performance accommodation search and pricing engine using **.NET Core, Kafka, AKKA.NET, Docker and Kubernetes** I helped to create an event driven microservice with complex real-time pricing algorithms with a strong emphasis on performance and accuracy. I also helped to establish a build/deployment pipeline capable of delivering .NET containers to Kubernetes environments using TFS, Docker and Helm.

Jan 2018 – Feb 2018 (Kinetic – Contract)

Working as a **contract software development consultant** providing help, support and guidance to the new development team of Kinetic's flagship "Aureus" product. This is a large **Microsoft stack Azure based project** with many components, which I designed and built while working for Kinetic. I was offered a short term contract to help mitigate the risk of outsourcing the project, by providing my expertise and knowledge of the system.

Feb 2015 – Dec 2017 (Kinetic)

In February 2015 I was promoted within Kinetic to **Solution Architect and Development Lead**. Continuing my work as a developer but now also leading the development team tactically and operationally. My role consisted of such things as **defining standards and practices**, following the **Agile** methodology, **source control management**, setting up of **CI/CD** pipelines, creating & managing an **Azure PaaS environment** and providing support to the business and colleagues. I was still involved in the implementation of the software architecture, from providing various levels of high level **architecture designs** to writing the code in **C#**. We made the transition to using **ASP.NET MVC** and **React** as our front end web technologies and using **ASP.NET WebAPI** microservices for separation of the various components in the software. We also adopted **domain driven design** techniques and it's supporting architectures (**OOP, IoC, Domain Modelling, Repository Pattern** etc.) in the core code. Plus the new platform which was developed under my guidance was built using **Azure PaaS cloud services** such as **Web Apps, blob/table/queue storage, AAD, Redis cache, Azure Search, SQL Azure** and more - all of which I was involved with from a planning/design perspective but also hands on technical perspective.

Mar 2010 – Mar 2015 (Kinetic)

I returned to Kinetic Worldwide as a **senior developer** using **ASP.NET** in VB and C#, building tools that are specifically aimed at the specialist OOH media planning teams. During this time, amongst other things, I worked on several complex **reach and frequency calculation models** from different global vendors, **optimising the algorithms** for speed and building innovative new concepts on top of the underlying outputs. The systems I built in audience measure were industry leading at the time and won me a lot of praise within the industry. Building the core software in **c#** but now with **Silverlight and WCF**.

July 2009 – Jan 2016 (HelpFindMeA.co.uk)

Alongside my permanent employment, during this time I acted as **IT Director** for a company I started with 3 others. In this capacity I **designed, built and maintained** an online shopping portal **optimised for search engine friendliness**, to generate product leads for businesses and to help consumers find the best deals on products across multiple sections. Written in **ASP.NET, c# n-tier architecture** and **MS-SQL** backend with many **integrations** such as xml feeds with clients and 3rd party advertising channels, CAP automotive data, vrm lookup, geocoding, sagepay payments and more. Unfortunately this business did not generate enough revenue to continue and the site has now closed.

... →

Older work experience: -

Since my graduation in 2005, I have worked in various roles as a software/web developer using the Microsoft development stack of .NET (ASP.NET/C#) with MS-SQL data layer - building e-commerce websites, CMS web applications and various other web based applications. During this time I built on my University degree foundation of knowledge to become a more proficient coder, finessing my architectural approach to creating pragmatic software solutions.

Education

2004 - 2005: Bradford University
2002 - 2004: Bradford College, Higher Education.
2000 - 2002: Bradford College, Further Education.
1995 - 2000: Royds Secondary School, Oulton, Leeds.

Qualifications

1st Class BSc (hons.)

Software Development Applications

Higher National Diploma

Software Engineering

AVCE

Information and Communication Technology (ICT)

Misc

- ISEB Intermediate Certificate in Enterprise and Solution Architecture

Interests

I have a wide variety of interests and like to continually learn about new things. Of course, I have an interest in I.T. and specifically in software, architecture and performance. Outside of I.T. subjects I like health and fitness such as weight lifting and practising Taekwondo in which I am currently 2nd Dan black belt. I am also a car and driving enthusiast, which extends from simply admiring the styling or performance of a great car, to watching Formula 1 and WRC, to improving my own skills having taken my IAM advanced driving test and participating in several track days. I also have an interest in the Russian language, which I have been learning from the Internet since 2012.

Employment History

- Pragmatech Software Solutions - Software Development Consultant / MD (Jan 2018 - current)
- Kinetic - Solution Architect & Development Lead (Feb 2015-Dec 2017)
- Kinetic - Senior Developer (Mar 2010-Feb 2015)
- WMG - Software Developer (July 2008-Mar 2010)
- Kinetic - Software Developer (Mar 2007-July 2008)
- Adtec Software - Software Developer (Sep 2005-Mar 2007)