

# 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. On the software architecture front, I am comfortable designing and building applications with **multi-tier architectures** such as n-tier or onion architecture. I tend to use principles of **Domain Driven Design** with **domain modelling, bounded contexts, repository pattern, CQRS** etc. coded using **OOP SOLID principles**. Several years ago, when **n-tier architectures** were the style of choice I created [my own n-tier architecture](#) (using CodeSmith templates) which generates a 4 tier C# code base suitable for implementing a tiered application using the manager pattern. As mentioned above, when dealing with more complex scenarios I prefer to use an onion architecture with pure domain models sitting at the centre of the application and application services and cross cutting concerns being secondary outer tiers.

On the **system architecture** front, I have designed and built large global applications by reducing the complexity of a system into to smaller components (i.e. **micro services**) integrating smaller components using **pull based API** calls or **push based event driven** systems such as using **Azure Service Bus** or **Kafka**. This approach also allows a layer of **anti-corruption** between third party APIs and the application structure. I have also made use of concepts such as **distributed state** for **web-farm/load balanced** scenarios, **caching** layers for **performance**, contextually relevant storage technology and usage of **cloud APIs** such as queues and web jobs where appropriate.

### .NET

I have been working in **.NET** for pretty much my entire career. I have become habituated to its methodologies and feel comfortable developing any application. I have developed both **desktop** and **web based applications**, using the **C#** language based on both **.NET Framework** and **.NET Core**. I have a keen eye for creating optimised code where performance is a necessity, such as using **asynchronous programming** or writing **optimized C#** using tools such as dotTrace for **performance analysis**.

### Cloud / Containers

I have used the **Azure** platform to design, develop and manage a large PaaS cloud environment, using a mixture of Azure technologies such as **Azure web services, Azure Search, Redis Cache, SQL Azure, Azure Active Directory, CosmosDB, Azure Data Factory** and others. I have also used **Docker** and **Kubernetes** to create containerized environments deployed both on-prem and in the cloud.

### Web Development

In my career I have built many **web applications** and APIs and also continue to build them in the **.NET** ecosystem using **ASP.NET (Core and Framework)**. I have a working knowledge of **HTML/CSS/JavaScript** and front-end frameworks such as **VueJS, jQuery & Bootstrap**.

## Web services

I have used ASP.NET **WebAPI** and micro service approach to create **service oriented architectures** as a way to break applications into smaller components and separate business logic from UI concerns. I do this using a mixture of **RESTful** and **RPC** style APIs, depending on the context. I have used also used **WCF** since I developed **Silverlight** applications in the past.

## 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 is 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.

## Misc

- Microsoft Visual Studio + NuGet + TFS/Git
- Azure DevOps, Continuous Integration, Continuous Deployment, Helm, K8s
- Agile methodologies
- Unit testing, automation

## Work Experience

### Feb 2018 – Present (Jet2 – Contract [extended])

Working as a **contract .NET developer** to assist in the expansion of services offered through the Jet2Holidays website based on **WebAPI microservices (C#)**, **Sitecore CMS** and **Vue.js**. Specifically working on a new high performance search and pricing engine using **.NET Core**, **Kafka**, **Docker** and **Kubernetes**.

### 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 consists 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 am 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 are now using **ASP.NET MVC** and **React** as our front end web technologies and using **ASP.NET WebAPI** for separation of the various components in the software. We have also adopted **domain driven design** techniques and it's supporting architectures (**OOP**, **IoC**, **Domain Modelling**, **Repository Pattern** etc.) in the core code. We are also now making use of various **Azure cloud services** such as **blob/table/queue storage**, **AAD**, **Redis cache**, **Azure Search**, **SQL**

**Azure** and more - all of which I am 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 our specialist OOH 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. 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)