

# Ian Nelson

Twink • Garmancarr Lane • Wistow • Selby • YO8 3UW  
07901 828483 • ian@iannelson.systems

- 
- Freelance Professional Software Developer with 20 years' experience across the full product lifecycle.
  - Specialises in back-end and middle-tier development; application integration via messaging and APIs.
  - Highly accomplished with SQL Server yet open to recommending alternative databases when appropriate.
  - Excels in achieving high scalability and performance from both greenfield and brownfield architectures.
  - Azure enthusiast – commercial experience of designing, developing and deploying native Azure solutions.
  - Confirmed Agilist and exponent of test-driven development, continuous integration and deployment.
  - Effective client-facing skills; has led analysis, design and development of successful high-profile projects.
- 

## Key Current Technical Skills

- Microsoft Azure products including App Services, CDN Profiles, DocumentDB, Redis Cache, Scheduler, Search Service, Service Bus (Queues, Topics, Event Hubs), SQL Database, Storage, Stream Analytics, WebJobs
  - C# 1.0 – 6.0, LINQ, async, .NET Framework 1.0 – 4.6
  - ASP.NET (MVC, WebAPI), RESTful Architectures
  - SQL Server 7.0 – 2016, SSIS. Oracle 8i – 10g
  - Entity Framework (Code-first), NHibernate
  - VCS (Git, Subversion, TFS)
  - Integration Patterns (APIs, Messaging), Rabbit MQ
  - Agile (SCRUM, Kanban, Planning Poker, XP, Pairing)
  - TDD (NUnit, xUnit, MSTest), BDD (MSpec, SpecFlow)
  - Rhino Mocks, Moq, AutoFixture, NCrunch
  - Continuous Integration (TeamCity, TFS)
  - DI/IoC (Castle Windsor, AutoFac, Ninject, Unity)
  - OOP, Design Patterns, SOLID Principles, NDepend
- 

## Contract Portfolio

Focussed on Architecting and Developing Enterprise .NET and SQL Server solutions. Clients have included:

### **Access Intelligence** (135 weeks, contract renewed)

Initially spent six months in an established team developing additional functionality for an innovative and highly configurable SaaS application delivery platform. Technologies used included Knockout (including mapping, components), Require JS, Dynamic LINQ, Entity Framework, ASP.NET MVC, SQL Server 2012, SignalR, Rabbit MQ.

Subsequently transferred to a small self-organising Agile team tasked with the rapid design and development of a greenfield Azure-hosted suite of systems required as the result of an acquisition. Drove the back-end and middle-tier architecture of the delivered solution, leveraging technologies including Azure Search, SQL Database, Service Bus, Rabbit MQ, WebJobs and ultimately surfaced through Web API to a Knockout-based SPA.

Defined source control and deployment methodologies, including using Git push deployment to Azure App Service deployment slots. Liaised with partner organisations to integrate solution with external APIs, queues and other data sources. Proactively undertook knowledge sharing of best practices and Azure technologies.

### **Piksel (formerly ioko365)** (117 weeks, contract renewed)

Provided .NET development capability to a mature white-label Video-On-Demand solution powering multiple branded platforms. Technologies used included Microsoft Azure, C#, ASP.NET MVC4/5, JavaScript, jQuery, Entity Framework, WCF, SQL Server 2008/2012, EPiServer, and PlayReady.

Heavily involved in a technology refresh of back-end supporting systems, notably the replacement of a third-party COTS package with a bespoke MVC administration site and WCF service layer. Also tasked with several pieces of R&D work, including proofs of concept using Orchard CMS and DECE UltraViolet.

### **The Health and Social Care Information Centre** (42 weeks, contract renewed)

Worked in a small agile team (including four developers at peak) creating a distributed suite of systems to facilitate the expansion of a national programme to calculate health gains after surgical treatment. Followed a SCRUM approach, seeing the project through nineteen fortnightly iterations from inception to live release.

The implemented solution comprises of multiple Windows services, RESTful OpenRasta APIs, an MVC3 portal, and numerous SQL Server 2008 Integration Services packages. Supporting technologies used included NHibernate, Castle Windsor, NUnit, NCrunch, Rhino Mocks, SpecFlow and TeamCity.

### **Atos Origin** (11 weeks, fixed timescales)

Joined a small established agile team to help achieve aggressive and immovable deadlines for the development of new systems required as a result of M&A activity within the parcel industry. Got rapidly up to speed with the existing architecture, codebase and business domain, delivering new functionality from day one. Took ownership of data migration and registration requirements, and committed a wide variety of changesets across the suite of systems and logical tiers.

The primary application delivered is a bespoke WPF (Prism) rich-client application, with supporting systems including multiple WCF endpoints, Windows services, and an ASP.NET MVC3 administration site.

### **Marshalls** (33 weeks, contract renewed)

Single-handedly designed, developed, implemented and documented a Greenfield message-based system to capture, assign and rank sales leads from multiple disparate systems. Technologies used included MSMQ, WCF, C# 3.0, Workflow Foundation, SQL Server 2008, Fluent NHibernate and Castle Windsor.

### **Ventura** (26 weeks, contract renewed)

Worked to aggressive timescales within a team of four to develop systems required by a new central government call centre. Technologies used included C# 3.0, .NET Framework 3.5, WCF, NHibernate, Monorail and Oracle 10g.

Took ownership of integrating web-based call-logging application with automated outbound dialler systems, by creating a WCF-based SOA solution to keep track of active calls. Also designed and developed a Windows Service and a Console Application to perform scheduled and ad-hoc batch processes.

### **NHS Choices for Capita** (35 weeks, contract renewed)

Developed functionality for the NHS Choices website allowing the display and editing of pages for organisations including dentists, opticians, and pharmacies. Technologies included C#, SQL Server and SharePoint.

Helped the development manager to introduce pair programming and push the test-driven agenda. Became known as a domain expert for NHibernate and Castle Windsor, providing help with these frameworks to the wider team.

---

## **Earlier Employment History**

Prior to entering the freelance market in 2008, notable permanent employment positions held included:

### **Marshalls**

Technical Architect and Lead Developer of a mission-critical ASP.NET / C# / SQL Server solution used by call centre staff at eight locations and via the internet by 350+ builders' merchants for the creation of quotations.

### **ioko365**

Lead developer of IMS Health "Early-Insight" web application that presents daily sales data to subscribing pharmaceutical companies. Created using ASP and VB6 COM objects with an Oracle 8i database.

---

## **Career Chronology**

<b>Contract Roles</b>		<b>Permanent Roles</b>	
12/2014 – 06/2017	Access Intelligence	10/2008 – 07/2009	National Institute of Health Research
09/2014 – 11/2014	Capita Customer Management	03/2008 – 09/2008	Ventura
07/2012 – 09/2014	Piksel Inc (formerly ioko365)		
05/2012 – 06/2012	Jet2.com		
05/2011 – 03/2012	HSC Information Centre	10/2003 – 03/2008	Marshalls
03/2011 – 05/2011	Atos Origin	03/2003 – 09/2003	Broker Network
01/2011 – 03/2011	Edexcel	12/2000 – 01/2003	ioko365 (formerly Infocom)
04/2010 – 12/2010	NHS Choices (for Capita)	09/1997 – 12/2000	Keane (formerly Icom Solutions)
08/2009 – 03/2010	Marshalls		

---

## **Education and Qualifications**

### **BSc (Hons) Mathematics, University of Nottingham**

Topics studied included Structured Programming, Coding & Cryptography, Game Theory, Algorithmic Graph Theory, Applied Probability, Combinatorial Counting and Statistical Inference.