Josh Comley

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I am a passionate, full-stack (C#, Angular, SQL Server, ASP.NET, mobile via NativeScript/Xamarin) technical architect based in Wandsworth, London, UK.

Experienced in agile, mentoring, training other developers, team leading, managing stake-holders and working alone off my own initiative.

Contribute regularly to the open source community.

Excellent communication skills, both written and verbal.

Really love coding.

✔	.NET (C#)	15 years
✔	.NET Core (C#)	4 years (since beta)
✔	Angular2+	3 years (since beta)
✔	AngularJS	3 years
✔	NativeScript	3 years
✔	Xamarin	2 years
✔	ASP.NET MVC	6 years
✔	Azure	6 years
✔	SQL Server	15 years
✔	JavaScript	14 years
✔	TypeScript	4 years

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🐦 twitter.com/joshcomley
🐙 github.com/joshcomley
📋 stackoverflow.com/users/64519/joshcomley

Work Experience

Self-employed (Brandless Limited)

📍 Remote Working

🕐 March 2017 - now

💼 Developer and architect

Since 2017 I have been building up a portfolio of products and tools.

As I am my own reference for these works, I have provided some code examples to demonstrate, and further demos can be made if necessary.

TypeSharp

TypeSharp is a C# to TypeScript converter. Although it has an API, for demonstration purposes it has been wrapped up into an Angular application. You can import and export workspaces, all cached in the browser.

See app.typesharp.co for demo (very early alpha)

IQL (soon to be open-sourced)

IQL is an ORM built in C#, converted to TypeScript (and ultimately JavaScript) via TypeSharp. This means the same code can run in .NET, Node, the browser and even phones via tools like NativeScript, React Native, Xamarin, Cordova etc.

It can map to any data endpoint (custom providers can be written) and enables Entity Framework style querying from TypeScript/JavaScript.

Getting data

```
let todos =
  await db.Todos
    .Where(todo => todo.Deadline < new Date() && todo.Name.includes("front end"))
    .OrderBy(todo => todo.EstimatedDays)
    .ToIqlAsync();
```

Modifying data

```
let todo = await db.Todos.GetWithKeyAsync(1234);
todo.Name = "A new name";
let result = await db.SaveChangesAsync();
if(result.Success) {
  // ...
}
```

IQL supports offline data synchronisation and is provided out-of-the-box with an OData provider.

IQL was built heavily with TDD and has around 600 unit tests. The tests also convert to TypeScript and run in Mocha.

IQL Forms

Using IQL as an front-and-back-end ORM, and OData as the pipeline, IQL Forms is a business application generator.

It is able to use metadata supplied from IQL about your data structure and configuration and generate web and phone applications dynamically. Information about permissions and validation are processed both in the front end via JavaScript/TypeScript and the back end via .NET.

The web applications are generated using Angular, and the mobile applications for iOS and Android using NativeScript combined with Angular and supports:

- ✔ 100% dynamic reporting on anything with export to PDF, Word and Excel
- ✔ Integration with DocNet for customised report templates
- ✔ File management
- ✔ Users management
- ✔ OAuth authentication
- ✔ Full CRUD
- ✔ Permissions
- ✔ Validation
- ✔ Material Design
- ✔ Login via text message or password
- ✔ Web, iOS and Android
- ✔ Easy developer customisation
- ✔ Themes

Demo available upon request.

DocNet (soon to be open-sourced)

DocNet is a Word document templating tool built in C# and converted to TypeScript via TypeSharp.

It enables Angular-esque templates to be converted into Word documents and works in .NET, the browser, Node etc.

DocNet allows JavaScript queries to be embedded within a word document for templating, which are compiled and executed by the dynamic JavaScript engine in IQL

The following code demonstrates usage which can be written into a Word document via Microsoft Word.

It will iterate through a list of blog posts printing out the author, their photo. Then for fans of the blog post (it's a demo!) it will show their location on a map which becomes embedded within the word document with a red pin if their location has a certain status otherwise a green pin. Convoluted, but demos the abilities of the tool!

```
{{foreach:posts post}}
Author: {{post.author}} {{image: source="post.author.photo" maxWidth="'1in'" maxHeight="'1i
{{post.text}}
{{if:((post.text != null && fan.longitude != null) ||
  fan.locations.filter(_ => _.latitude != null && _.longitude != null).length > 0)}}
{{map: centreLatitude="fan.latitude" centreLongitude="fan.longitude"}}
{{foreach:fan.locations location}}
{{map-pin: latitude="location.latitude" longitude="location.longitude"
  autoLabel="true" color="location.status > 2 ? 'red' : 'green'"}}
{{:map-pin}}
{{:foreach}}
{{:map}}
{{:if}}
```

TsBeautify (open-source)

TsBeautify (github.com/joshcomley/tsbeautify) is an open-source code beautifier written in C# and converted to TypeScript via TypeSharp. This also runs in .NET, Node, web browsers and on phones.

C# .NET .NET Core Angular2-9 Azure Code First MVC5 Entity Framework Core BDD
TDD SOLID REST Mobile C# 4.0 ASP.NET SQL Server XHTML CSS JavaScript LINQ

Hazception Limited

🕐 December 2015 - December 2016 (12 months)

💼 Developer and architect

For the construction industry: built an **award-winning** online hazard awareness video testing suite (see www.hazception.com for information).

Managers can upload their own videos, highlight and tag hazards throughout the video and then create exams for potential on-site workers to assess their ability to spot hazards within their own work-site.

Also built the brochure site linked above.

Build:

- An .NET Core and SQL Server web application with an AngularJS and HTML5 front-end web application
- Web API, .NET Core based backend for above web site using Entity Framework Core, Code First and SQL Server

C#   .NET   .NET Core   Angular2   AngularJS   Azure   Code First   MVC5   Entity Framework Core

BDD   TDD   SOLID   REST   Bootstrap   Xamarin   Mobile   C# 4.0   ASP.NET   SQL Server

XHTML   CSS   JavaScript   jQuery   LINQ

Self-employed (Brandless Limited)

🕐 2016 (12 months)

💼 Developer and architect

As part of .NET Core development, porting and creating world-first .NET Core libraries.

- Implementation of custom and comprehensive SQL Server based security later in Microsoft's Entity Framework Core
- Bug fixes submitted for Microsoft's Entity Framework Core
- .NET Core port of Microsoft's .NET OData implementation
- .NET Core port of SendGrid mailing API
- .NET Core port of Microsoft's System.Net.Mail (SMTP implementation)
- .NET Core port of Google's HTML Compressor

C#   .NET Core   SQL Server   Entity Framework Core

Self-employed (Brandless Limited)

📍 Remote Working

🕐 2014 - 2015 (12 months)

💼 Developer and architect

Developing a suite of portable technologies and applications for my own business.

- An MVC5/Angular JS based, HTML5 web application (no longer available)
- Web API based backend for above web site using Entity Framework 6, Code First and SQL Server
- Corresponding phone applications for Android, iPhone and Windows Phone
- An entirely portable C#.NET based image manipulation library with support for Windows (including ASP.NET), Windows Phone, iOS, Android
- Portable C#.NET based audio playback, recording, streaming, decoding and effects library for Windows, Windows Phone, iOS and Android
- A C# to C# serializer (it's more useful than it sounds!)

C# .NET Angular2 AngularJS Azure Code First MVC5 Entity Framework 6 BDD TDD SOLID REST Bootstrap Xamarin Mobile C# 4.0 ASP.NET SQL Server XHTML CSS JavaScript jQuery LINQ

Sciensus Ltd.

📍 Brighton, UK

🕐 May 2013 - October 2013 (6 months)

💼 Developer and architect

Developer and lead developer on software primarily used in hospitals to aid disease analysis.

My work at Sciensus ranged from rapid creation of a fully customised call centre web application to ensure swift and accurate recall of faulty medical equipment, to a web based disease tracking system for Hepatitis.

Good UX, high security and data anonymity were all essential when building these applications as they were to be used in high pressure, security critical environments.

I introduced the team to a number of principles including DRY, agile and a collection of newer (at the time) technologies such as Bootstrap.

My role also involved mentoring other developers there

C# .NET Mentoring Agile BDD TDD SOLID REST Team Training MVC 4/3 Bootstrap C# 4.0 ASP.NET Client Facing SQL Server XHTML CSS JavaScript jQuery LINQ

Freedman International Ltd. / Kaboodle

📍 London, UK

🕐 Mar 2010 – April 2013 (became Kaboodle as of March 2011) (37 months)

💼 Developer and architect

Developer and lead developer on software primarily used in hospitals to aid disease analysis.

N.B: Freedman formed a start-up called Kaboodle for their new project. As such although I was at the same office I was technically in a different role and company as of March 2011

Lead developer and product architect a major in house product using C# 3.5/C# 4.0, WCF and MVC

Freedman is involved with helping multinational companies achieve their global marketing goals. As such, Freedman has undertook a challenge to build a web application to facilitate this, encouraging communication and visualising every aspect of the global marketing process. They envisage a product underpinning the company's finances in the years to come.

My role was to work as technical lead for the team of 5 developers and architect on the project from start to finish. The front end to the application was built in MVC 4. This included managing and training team members in Ukraine.

The only decision beyond my control was the employment of SharePoint 2010 as a backend for the data, however all SharePoint access was abstracted away via an OData driven RESTful WCF service authenticated using OAuth – in other words we created a full, public (secured) REST API for the application. SharePoint is completely dynamic; the customer can change their experience very easily, adding columns to existing "tables", even new "tables" of data and so on. The API had to reflect this live, delivering different data and metadata whilst the web application had to be robust enough to survive such changes in its underlying schema without requiring a reboot.

This particular project was one of the most challenging yet of my career due to an incredible number of hidden complexities and limitations within the underlying key technologies when dealing with completely dynamic data feeds. It has also given me excellent experience leading and managing a team of developers.

C# .NET Mentoring Agile BDD TDD SOLID REST Team Training OAuth OpenId
MVC 4/3 C# 4.0 C# 3.5 ASP.NET Client Facing SharePoint 2010 Continuous Integration
SQL Server XHTML CSS JavaScript jQuery WinForms WebForms Technical Writing LINQ

Paxton Access Ltd.

London, UK

🕐 June 2007 – Mar 2010 (33 months)

💼 Developer and architect

Built a variety of internal management web applications whilst maintaining existing website.

My work here has involved the lead development of over 50 web applications using ASP.NET and SQL Server, and over the last year ASP.NET MVC with jQuery.

Another key project includes the development of on an online system for controlling and reporting on remote security systems – opening doors, reporting on who is in a building etc.

Many examples of work can be given from time at this company; from web based complicated mathematical business projections and visualisations, complete task management tools and a custom blog to detailed sales history applications and an internal knowledge base. Work here is pushed out at a high standard and includes the design of all applications to very tight deadlines, through a mixture of agile and classic development structures. Once published, applications are often immediately used by up to 2500 people.

C#   .NET   C# 3.5   ASP.NET   SQL Server   HTML   XHTML   CSS   JavaScript   jQuery   MVC
ASP   ASP.NET   WinForms   WebForms   Technical Writing   Unit Testing   Silverlight   LINQ

Fit Systems Limited

Brighton, UK

🕐 April 2008 – December 2008 (8 months)

💼 Developer and architect

Built a holiday website with custom build CMS.

Development and client facing role – helped design and entirely developed the holiday websites found at http://www.purezanzibar.com and http://www.puremozambique.com. Please note these websites have since been modified and do not represent my original work! These websites both run from a common code-base and more "themed" websites can be created from the comprehensive CMS at a later date.

C#   .NET   C# 3.5   SQL Server   HTML   XHTML   CSS   JavaScript   Client Facing   WebForms
LINQ

Riot Creative Limited

📍 Brighton, UK

🕐 April 2008 – December 2008 (8 months)

💼 Developer and architect

Developed a pub/very-mini-social website and associated CMS (Content Management System)

Although this is no longer live due to the client not paying Riot Creative Limited, it can still be found at the test site: http://themontague.stage.riotcreative.co.uk/

This project had a two week deadline to build a pub website with a slight social aspect along with an associated CMS to manage the various pages on the site. CMS can be demonstrated.

I also both helped design and entirely built the company website (http://www.riotcreative.co.uk). The site is XHTML 1.1 compliant and works 100% in all the major browsers (IE6, IE7, IE8, Chrome, Firefox 2, Firefox 3, Flock, Opera and Safari).

C# .NET C# 3.5 SQL Server HTML XHTML CSS JavaScript Client Facing WebForms LINQ

Cubeworks Limited

📍 Brighton, UK

🕐 March 2006 - June 2007 (14 months)

💼 Developer and architect

Build database driven web applications in ASP.NET using C# and SQL Server

Working in an agile manner with project managers, later on as a team leader. The core of my work here has been ASP.NET web development with SQL Server, although included development of a few win forms C#.NET applications. Work was also heavily client facing, being involved in all aspects from pitching work to clients to negotiating through projects.

C# .NET SQL Server C# 3.5 HTML XHTML CSS JavaScript Client Facing WebForms LINQ

Tracalert Limited

📍 Brighton, UK

🕐 July 2006 – October 2006 (4 months)

💼 Developer and architect

Build a customer management system in ASP.NET and SQL Server for call centre

Designing and building a database driven customer management system with various tiers of user authorization and user impersonation for administrators. Highlights include addition of an ASP.NET text-to-voice service.

C# .NET SQL Server HTML XHTML CSS JavaScript ASP.NET WebForms

Dealogic

📍 London, UK

🕐 June 2005 - March 2006 (9 months)

💼 Junior Developer

Design and build tools to help maintain finance customers' accounts

Work here involved building complex multi-threaded GUI tools to help maintain national and international banks' accounts with Dealogic in a mix of WinForms and ASP.NET applications, using .NET remoting.

C# .NET SQL Server HTML XHTML CSS JavaScript C++ ASP.NET WinForms

WebForms

East Sussex County Council

📍 Lewes, UK

🕐 June 2003 - August 2003 (3 months)

💼 Junior Developer

Provide technical support and assistance for all council staff

Provided first (and some second) line technical support in a team of four for the entire employee population of East Sussex County Council for any IT (hardware and software) related problems. Trained on call logging system.

C# .NET SQL Server HTML XHTML CSS JavaScript C++ ASP.NET WinForms WebForms

Education

Computer Science and Artificial Intelligence

Sussex University
2002 - 2005

Focus

Java, C++, Haskell, Matlab

Dissertation

An embedded C application to control media computers via Bluetooth on Symbian based smart phones.

Get in touch

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