# Overview and Core Competencies

* Commercial .NET development experience working with C#, Microsoft ASP.NET MVC & WebApi, HTML, JavaScript, CSS and SQL Server.
* I have a keen sense for ensuring that good development practises are followed.
* I am a strong proponent of using Test Driven Development as part of my workflow and I take great pride in using the practise to reflect the quality of the work I produce.
* Experience with working within an agile software development team as well as coordinating product development with geographically distributed product teams.
* I love learning about and using new technology, either in my own time, via attending local tech meetups and user groups or on the job.
* I also like to contribute towards OSS development. I have a couple of projects that I have built and maintain via Github and distribute via Nuget.

# Work Experience

## Senior .NET Developer – *Derivco*

**Ipswich (UK), Jan 2016 – present**

Since starting my previous role at Derivco, I have been asked to join the Client Core/Framework team. The work we undertake involves investigating and incorporating solutions aimed at improving the capabilities of our product in-terms of functional and non-functional aspects such as product architecture, performance, improving developer experience, technology/platform migration, increasing user traffic.

We also build new features and services to the existing web platform that are consumed by other product teams. My role also requires that I liaise with dedicated product teams and maintain oversight over the solutions they develop, ensuring that the design adheres to our product's architectural standards.

* Search Engine Optimization: Our core client product functions as a single page web application built using a purpose-built JavaScript client framework. To aid in making our solution SEO compatible, we extended our product to make the framework isomorphic, allowing us to pre-render pages with explicit data that the client framework can automatically bind to. We also had to extend the server side ASP.NET MVC render pipelines to improve caching when rendering page responses.
* Improving site capacity during peak user load: Our solutions are very data intensive and at peak user load can cause immense strain on backend data services. Implemented a custom in memory JavaScript cache to reduce the number of network calls made to our API services.
* Performance improvements: We have implemented custom solutions for detecting user inactivity and polling network requests etc. to reduce strain on back-end services
* Improving the developer experience: Assisted in allowing our Client product teams to migrate our DVS system from SVN to Git.

Primary technologies I currently work with include: c#, ASP.NET MVC, JavaScript, CSS/SaSS

## Senior .NET Developer – *Derivco*

**Ipswich (UK), July 2016 – Dec 2016**

After moving to the UK, I have worked at Derivco, a multi-national company that specializes in creating software solutions that cater for the online gaming industry in the UK and European markets.

I work as a senior software developer in the Client/Lobby team, tasked with developing solutions for our web platform, that helps us integrate with internal and third party marketing and gaming providers from within our online sports betting portals, with the aim of providing a rich lobby experience for our users.

Key Technologies used across all solutions: ASP.NET MVC, c#, JavaScript, CSS/SASS.

## Senior .NET Developer – *Xero*

**Auckland (NZ), Aug 2015 – June 2016**

I currently work for Xero, a New Zealand based brand globally regarded as one of the best cloud based accounting and financial software solutions available. I am based in the engineering team tasked with maintaining Xero’s billing and subscriptions platform used across all core products. My role within the team involves:

* Developing scalable software services and API’s used to control regional and global pricing models, conduct daily invoicing operations across various regions, offline processing jobs that handle payment collection for all due subscriptions
* Migrating existing product buy flows to ensure PCI compliance standards are met for credit card validation and payment
* Devising custom software tools to aid with streamlining our development process, migrating pricing plan data
* Interfacing with other product engineering teams to devise strategies for shifts in our billing /subscription architecture
* Serve as an engineering consultant for Xero’s CX customer support and BI teams to resolve subscription related call escalations and publish any reports/statistics on request
* Conducting potential Engineering and QA candidate interviews when requested by HR

Key Technologies used across all solutions: Microsoft ASP .NET MVC and Web forms, JavaScript, CSS, XSLT, SQL Server, Dapper, XUnit, TSQL and PowerShell scripting, Data-Dog (metrics).

## Senior .NET Developer – *Little Lot*

**Auckland (NZ), Mar 2014 – Jul 2015**

Little Lot, a NZ based startup, is an advertising platform which aims to deliver branded wallpapers targeted at its user’s desktop and mobile/tablet lock-screens, while donating a percentage of the advertising revenue earned to a charity/cause of the user’s choice. Little Lot has built a series of apps for the windows (desktop), iOS, OSX and android platforms. My role within the team was to develop and maintain the core cloud-hosted web platform comprising of a REST API, front-end website, administration site, building various offline processing tasks(emails, push notifications), core business logic & data layers used by all apps. Key technology areas I have worked on:

* Windows Azure: Worked with a number of Azure services such as Azure Web Applications, Azure Web jobs, Azure SQL Database, Azure Blob storage, Azure CDN and the Azure Notifications Hub
* Microsoft ASP.NET MVC 5.1 used to deliver a responsive, platform specific experience for the front facing website and administration portal
* Microsoft ASP.NET Web Api 2 used to build Little Lot’s REST API
* Microsoft Entity Framework 6 used as the ORM layer
* Other key frameworks and services used: Ninject (DI), NUnit (TDD), Moq, Raygun (error logging), Mailtrap (email testing), Facebook open graph (for sharing wallpapers)
* Front-end libraries used: lodash, jquery, Knockout , purecss, flatlab
* Open source libraries used: Refit, fullPage.js, T4MVC, MarkdownSharp, Handlebars
* Microsoft System Center 2012, used to deploy Little Lot’s Enterprise Windows application in a corporate network
* Evaluating Google Material design using the Polymer 1.0 web-component library for an upcoming site and portal re-design.

## Intermediate .NET Developer – *Intergen*

**Auckland (NZ), Nov 2012 – Jan 2014**

I worked in the Enterprise Applications team to develop and maintain a wide range of external client facing solutions, utilizing numerous technologies and frameworks across the .NET technology stack.

* Custom ERP solutions using Windows Forms, .NET 3.5 & SQL Server 2008 R2
* Developing a demo application client used by Microsoft to demonstrate new SQL Azure features for the 2013 Worldwide Partner Conference using Microsoft WPF, and Telerik WPF controls
* Adding new features to a custom built web portal designed to assist local councils with land valuations built using Microsoft ASP.NET 3.5, JavaScript, CSS & jQuery, SQL server 2008 R2
* Assisted in the development of a web portal for healthcare vendors to remotely manage & monitor electronic wheelchair equipment, using Microsoft ASP.NET MVC 4, JavaScript, CSS, Kendo JS, SQL server 2012

## Intermediate .NET Developer – *Beca*

**Auckland (NZ), Dec 2010 – Nov 2012**

Beca is one of the largest multi-disciplined Engineering Consultancies in the Asia Pacific. I worked for the Beca Applied Technologies Division, where I developed a number of internal LOB applications and tools to compliment organisation and engineering practises across other divisions within the company. Key technology areas I worked on include:

* Web application development using Microsoft ASP.NET MVC 3, Entity Framework 4.0 (ORM layer), SQL server 2008, front-end libraries such as JQuery, Bootstrap.
* Silverlight 4 client applications, designed to integrate with SharePoint 2010 using frameworks like Microsoft Prism, Entity Framework 4.0.
* SSRS and TSQL reporting to aide in year ending Remuneration reporting for GM's and Section managers.

## Performance Testing Engineer – *Orion Health*

**Auckland (NZ), Jan 2010 – Nov 2010**

Orion Health specializes in developing world-leading healthcare software platforms used globally by clinicians and hospitals. I was based in the Performance testing team, responsible for evaluating a range of healthcare products, using technologies and tools like Java, Apache JMeter, and Ruby (used by some of the test automation tools).

## Junior Web Developer – *Fishpond NZ*

**Auckland (NZ), June 09 – Dec 09**

I worked for Fishpond, a NZ based online retailer, as a junior web developer. All development on the online shopping portal was done using PHP 5.0 and MySQL 5.1. I also worked on several offline processing services, built to cater for maintaining supplier and stock information. Parts of this system were scripted using Python.

# Open Source Projects

I have created the following OSS libraries, currently hosted on my GitHub profile:

* **Mvc-to-Csv 1**: An MVC extension library that can serialize a collection of POCO’s to a CSV file and returned as part of the response body. Available for download via Nuget.
* **DPS-Payfit 2**: A wrapper library for interacting with the DPS Payment Express Hosted – PxPay 2.0 API, useful for enabling PCI compliance. Currently under construction.

1. https://github.com/pirahawk/mvc-to-csv

2. https://github.com/pirahawk/dps-payfit

# Qualifications

2009: **Masters of Engineering – Hons** (Software Engineering), the University of Auckland

2007: **Bachelor of Engineering – Hons** (Software Engineering), the University of Auckland

# Publications and Awards

Microsoft Community Contributor (2011)

A Novel IEC 61499 Runtime Environment implementing the cyclic execution semantics (2009), Masters of Engineering – Thesis

Proposing a novel IEC61499 Runtime Framework implementing the Cyclic Execution Semantics (2009), paper submitted to the 7th IEEE International Conference on Industrial Informatics (INDIN 2009), Cardiff.

University of Auckland Engineering Part-4 Industrial Prize - Best Intelligent System (2007) for using Artificial Intelligence to automate Forex Currency Trading

# References

*Note:* My referees are currently based in New Zealand and Australia. On account of time-zone difference, please let me know if you wish to speak to any of my referees and I can arrange for them to expect to be contacted for a reference.

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