Curriculum Vitae: Richard Morice

Personal Information

Name: Richard Morice Address: 1 Tasker Road, Crookes, Sheffield, S10 1UY Email: <u>rick@floor9design.com</u> Telephone: 07791097788 Nationality: British Birthday: 30/01/1980 Linkedin: <u>https://www.linkedin.com/in/rick-morice-7a70a581</u> Website: <u>www.floor9design.com</u>

Profile

I am a dedicated and rounded systems developer. I have solid experience in all aspects of modern system design including front and back end systems. I have a special interest in high quality coding and am an expert in HTML, CSS, PHP (including MVC & OOP), Javascript/Jquery, MySQL, SQL Server and MongoDB databases, frameworks such as Laravel, Symfony, CakePHP, and Zend Framework as well as systems such as MOODLE and Wordpress.

I have a strong background in systems work that has enabled me to deliver large applications for clients. I have used established architectures and patterns across the whole development cycle to deliver solutions that are extensible, reliable and efficient.

I have experience working within various project management systems, including traditional Waterfall and PRINCE2 techniques, as well as agile methods such as KANBAN and SCRUM. I also regularly combine these with a test and documentation driven approach, for example producing rigorous documentation (Wikis, PHPdocumentor, OpenApi) and automating tests using PHPUnit and Postman. I also am a strong advocate of automated systems and methods to tie project elements together, for example using GIT/Github, TravisCI and other automated testing and go live processes.

I also have a solid understanding of other items such as Email/Server admin (Linux/Windows) and setup, analytics and FTP. I have experience with modern systems, such as cloud computing (AWS), as well as using VMs for testing and emulation, for example using Vagrant and Docker. I have an excellent command of Photoshop and Pro-Tools as well as experience in many other modern multimedia applications.

I am a hard-worker and have a track record of "above the call of duty" dedication to reach tight deadlines in a high-pressure environment. I have delivered practical solutions for reputable clients, including: BA, BP, The Ministry of Defence, the NHS, The University of Nottingham and Hull University all the way down to local plumbers and builders.

Experience

I have performed a number of contracts since I started formally contracting in 2014. Many of these roles have been short/quick delivery projects. It should be noted that I have never been out of work for anything longer than a few days. Much of my recent years work has been remote; offering my clients flexibility, while maintaining and building the vital communication and trust between parties.

To keep my CV readable and relevant, this concentrates on the larger or more interesting projects I have been involved with, paying particular attention to technologies and relevant work done.

Kumon/LDA (2023, 4 months extended)

Kumon offer out-of-school classes, specialising in help with Maths and English. Their site and systems are used to offer services and arrange appointments across 60 countries and regions. I was contracted as part of a team specifically as a lead developer. This role entailed a complete reworking of their system, including vital data import and seamless transition for the business. This was a huge project with a similarly huge amount of features.

As lead developer I did the vast majority of the work within the project. In collaboration with managers and stakeholders, I designed a custom php/MySQL Laravel system from scratch. The system had a huge amount of features including: multi language support, appointment management, as well as a complex and comprehensive custom CMS. All of this was built within a reliable continuous integration/continuous delivery environment in Azure, meaning that agile and quick release processes were possible.

The system used Laravel, MySQL, jQuery as well as numerous other front-end plugins and systems. The appointment booking functionality and calendars were implemented using FullCalendar and TempusDominus. The entire admin area used Boootstrap and FontAwesome for styling. The CMS used elements such as Summernote. Data reporting used Datatables.

Specialist Motor Finance (2023, 3 months extended)

Specialist Motor Finance are a car finance company. One of their critical systems used extremely out-of-date approaches and technology, with php5, old versions of jQuery and so on. While it was due to be sunset, the system had multiple security issues as well as multiple long running bugs. As the software was business critical, this contract was to ensure that the software could safely be used for at least a year.

Furthermore, the company were unsure of a release process or how to move forward. I developed a release process alongside the IT department, as well as implementing many industry standard systems and approaches. This resulted in an improved testing regime, localised development, updated GIT based version control as well as other more management friendly techniques, such as leveraging JIRA to manage software development cycles and patches.

I implemented the required security upgrades, including multiple code and version upgrades. Following these successful upgrades I was extended to further improve the code, fixing and improving long running issues within the software to ensure that the company would be able to run efficiently until the software was sunset.

Temper (2022-2023, 3 months)

Temper are a short term work/recruitment agency from the Netherlands. They were launching into the UK market and needed lead developer cover as part of this project while they found a permanent lead developer.

The Temper system is a microservices driven architecture with many complex requirements. It is mainly based in Laravel, and uses many parts of software architecture. It offers features for matching users to clients, reporting for providers, multi-language support across multiple sites, and many other challenging technical solutions. This requires skills from all elements of a microservices environment, from queuing through to advanced database querying and reporting.

I also piloted several new approaches within the development team. I coached and assisted the Junior developers in my team, ensuring that best practices were adhered to and applied. The UK launch went successfully, and I handed over in early 2023.

Made For Trade Ltd (2022, 6 months, extended)

Made for trade are a manufacturing company delivering Bifold Doors and Lantern windows. They needed a complete rework of an existing quote system with extended functionality. This was as part of a company move to a more digital approach with software team.

I designed and worked on a complete quote system. This a greenfield project initially built in Laravel but was extended to be a microservices installation that offered numerous features. Customer management, reporting, an API were all created. A front end that included 3D rendering and customer wizards was developed. While based on PHP and Laravel, it also included major work with MySQL, SQL Server, as well as in JSON API access and front-end 3D modelling using BabylonJS. All of this had to be built in a best-practice way that allowed to hand over the work for the planned new IT team. I developed the whole system from scratch, using an AGILE approach and Continuous Integration (via Travis), as well as documenting, handing over and training the new staff allowing a smooth transition.

Crowdfunder Ltd (2021, 6 months, extended)

Crowdfunder is an SME crowdfunding service. They had a high workload and contracted me to develop an API, improve working processes and to help with the infrastructure.

I designed and implemented a comprehensive yet lightweight set of microservice API solutions using the Symfony framework. These plugged into existing databases, as well as acting as a stepping-stone to a microservices architecture. Using best practices was essential, and to that end APIs were developed using comprehensive unit testing in a docker environment. Continuous integration and an improved server architecture allowed for easy updates. High software standards, such as JSON API, PSR-12 and quality documentation meant that the project was easy for the team to integrate to other parts of the company. Clients (distributed via composer) were also developed for the general public to help third parties to integrate easily.

This was a truly top to bottom contract that I delivered essentially alone. However, by working alongside and tracking the business needs of the software, the API easily slotted into the company portfolio. For example, the API now delivers authentication for all of Crowdfunder.

Intrica Ltd (2019-2020, 3 months, extended to a year)

At Intrica I worked in a team developing the next generation of an industry leading RESTful API system built on multiple microservices. I was key to guiding and leading this team, proposing ideas and consulting those with detailed knowledge. This project was in depth in almost all areas of software development, including: system architecture, server implementation and virtualisation, database design/redesign, complex back end interactions and implementation, front end development and customer relations. This was developed using cutting edge software such as Laravel 7, and there were many extra elements to make it unique, such as Hashicorp Vault, JSONAPI compliance throughout, multi-database information structures, custom composer projects and many more.

The entire project was an exercise in best practice and as this project was within the banking sector, this best practice is key to offering an appropriate level of security and accountability for the project.

DP Publicity (2018-2019, 3 months, extended to a year)

At DPP I was part of a team developing a new train ticket booking system. This involved taking over an existing system and redeveloping it from the ground up. I redesigned a suitable MySQL database from scratch, covering extremely complex requirements and ensuring that they were appropriately modelled. Import scripts and data cleaning was performed.

This was then implemented as a system using Laravel. A complete RESTful API was implemented and used to expose this database. Further API endpoints were also provided to allow complex and multi object interaction with the VueJS front end being developed by the team. Substantial unit and functional testing was performed. The entire project was written with the intention of being handed over for inhouse maintenance; thus many coding standards were strictly adhered to, such as PSR2. Comprehensive documentation was developed as (phpDoc and markdown manuals) to help with transitions and team work.

Age Partnership (2017-2018, 1 year contract)

Age Partnership offer financial services through various web portals and services. I have been contracted to offer support as the company looks to upgrade and improve their various system. My role has included tackling business critical issues spread over many difference projects and codebases.

I have upgraded deprecated or poor-quality old code, begun developing new and efficient processes and systems for the business as well as generally improving the methodology of the company. Technologies have included PHP5.6-7.2, MySQL5.7, Git, PhpDocumentor, PhpUnit as well as many other items such as implementing database abstraction and UUID database structure improvements.

My role was part project lead, part consultant and part developer. I have passed on knowledge of best practice, regularly presenting and coaching the junior developers and have been tasked with moving the company toward a perfect code development approach.

Solderstar (2016-2017 3 month, extended to 15 months)

Solderstar had developed a basic system as part of their new software suite. This system was only for demo purposes and needed redevelopment from the ground up. I was taken on as a specialist contractor/consultant to design and implement this.

The project required a full database redesign, server and hosting purchase and configuration, reverse engineering an existing Symphony project and its redevelopment. I also created a comprehensive documentation system with the aim of offering a truly flexible and extensible project. There was a strong aim of implementing best practice throughout the project.

Many aspects of best practice were established, with the project including almost all possible angles of system development. The project included Git, MySQL, Laravel as well as creating an appropriate RESTful API for the system to utilise. I also consulted and implemented scratch ubuntu server hosting and as well as offering system/server admin, including scripting and server optimisation where needed. I then created a comprehensive set of tools to analyse the system data and provide an easy to use interface for all users.

The system is under use by many major clients, such as Nokia. As a point: this contract was initially 3 months but following successful development it was extended multiple times and ended up with over 15 months of development.

ADI-UK (2016 3 month contract)

At ADI I helped build their core framework and functionality. Much of my role was to enforce best practice within the new application development. This involved everything from documentation and code standards implementation to management level issues such as Agile/Scrum process improvement and optimisation.

This role required high quality of coding as their clients will include the NHS and other medical establishments. Data security, coding best practice and ease of use were all key to ensure a successful and appropriate product. I ensured this was done correctly.

ADI used a Laravel, MSSQL and Mongo environment. I worked to improve and develop their code and approach. I spearheaded efforts to improve their workflow, moving them toward a standard virtualised environment using Docker. I also worked with developers and management, implementing PSR-2, PHPDocumentor and PHPUnit to enforce the high-quality testable systems they required.

This was all done in a controlled and organised manner, using JIRA and Git to establish appropriate working between developers and management.

Convergys (2015 - 2016 3 month contract, extended)

My role at Convergys was to take the lead in a major software upgrade to the core company phone system. Convergys run a number of call centres, running an old and poorly written procedural PHP system. This software and setup had failed compliance testing for security.

My job was to research and implement solutions to move this codebase toward a more secure system, with the initial requirement being to pass testing. This required upgrading the codebase from PHP from 5.3 to 5.6, moving to MariaDB from MySQL, implementing TLS1.2 (https) and creating a unified server setup for over 100 servers across their 4 main systems.

Aside from these upgrades, I offered further recommendations and improvements to their way of working. I reviewed and assisted with their SVN/version control processes, decreasing their issues when merging. Furthermore, I attempted to move them to a more sustainable and efficient working

environment creating a vagrant/VM based development environment, as well as implementing code quality standards such as PSR-2.

Diva Creative (2015 – 3 month contract)

My role at Diva Creative was half developer, half consultant. While developing I was able to use my knowledge of Wordpress to deliver projects for key clients, working to tight schedules and delivering high quality code. As part of this process I often modified existing or developed my own plugins to deliver custom features for clients.

On top of this, some truly custom code was delivered. I engineered a bespoke database driven children's game for Leicestershire City Council. This required substantial and complex back end work, ultimately slotting in to their existing Wordpress install. Despite tight deadlines, and a very fluid project structure, this has had a successful launch.

While consulting I was able to move the company toward a more sustainable and safer developing environment. I introduced and implemented new workflows for code development, discussed existing systems and offered improvements across the board. This encouraged quicker collaboration between teams and will work towards a more resilient and safer environment for their work. As part of this I provided a full roadmap of an ideal company project setup, advising on future technologies, options and approaches to improve the company.

At this role I was considered a lead on technical issues including; HTML5, CSS3, jQuery, Php, MySQL, Git, Server setup (LAMP stack configuration) amongst others.

The University of Nottingham (2014 - 6 month contract)

This role involved a lot of systems, utilising frameworks such as Laravel and Zend Framework 1 to deliver custom applications. I developed new code as well as tidied and improve the existing codebase. Implementing best-practices with properly designed databases was been key.

I created software using well known design patterns and architectures. Ease of handover has been a main objective, and to achieve that I implemented PSR-2 level documentation (using Phpdocumentor), as well as writing tests using PhpUnit. By using RESTful standards, my code is API ready. The code is extensible, testable and standardised.

I have used PhpStorm to write code (including php 5.3-5.6, HTML5, CSS3 and jQuery), while using MySQL and MongoDB for database development. All of this was created inside a Vagrant environment, further improving my linux and scripting skills. Github, Sourcetree and Bamboo were used to control the workflow and go live processes.

This role has given me the chance to work in a dynamic environment that follows best practice very well. I was been able to apply techniques and use systems that are often neglected in smaller organisations, and because of this the quality of code I have produced has been high.

Element Enterprises (2014)

This was a CakePHP based application designed to give metered access to a multi-million-line database of business information. This required some clever modelling of data, efficient use of MySQL setup and well-written queries to optimise searches.

I singlehandedly developed this system, delivering a comprehensive service to the client. Everything from database design, data import, php and front-end development, as well as basic branding and post release support and documentation was done efficiently and to a budget.

Nicholas Associates (2013-2014)

At Nicholas Associates I took a lead role in delivering a key new client system, as well as upgrading and delivering several of their other products. I took lead on the PHP/SQL server based "Skills Matrix" system, finalising key functionality, implementing features and ensuring that requirements were met. As part of this process, the in-house existing PHP framework required major rewriting. By collaborating with the PHP team, I upgraded this to move toward a much more appropriate ORM system.

During this development I was also often asked to assist with other framework issues, such as fixing existing bugs, developing new features and being a third line support to some customers.

Within this role I quickly expanded my SQL knowledge to include SQL server, as well as gained a huge amount of knowledge about the MS hosting environments. I also learned a great deal about some less common coding styles as I adapted to the in-house systems and frameworks that were developed.

The Kings Foundation (2012-2013)

I fulfilled a one year contract for the Kings Foundation as a lead developer. My remit was to create an employee contacting application which extended an existing Facebook application developed through a third party. I was responsible for designing, developing/implementing, and ongoing maintenance of this application. This created and managed thousands of employee contracts, enabled insightful statistical analysis, and was key to a major organisational optimisation.

This required true front to back end development, spanning technologies from Server management (LAMP), advanced MySQL, PHP (OOP with CakePHP), HTML4/5, CSS, Javascript and JQuery (including the Twitter Bootstrap framework). I created a workflow including version control (Git) and ensured that the system was maintained sensibly. I was in control of every aspect, from database field names to CSS class names.

From this application I constructed a complex set of reporting and analysis using the MyDBR Stats package. I also built Excel spreadsheet reports connecting directly to the application, allowing managers to manipulate and explore data in a comfortable environment. E-Learning was also implemented, and the system was extended to seamlessly allow new users to log into a Moodle instance and perform specific courses depending on their contract type.

At Kings I feel I was able to get invaluable experience in creating large interweaved systems and ensuring that they interacted efficiently to deliver a powerful web experience.

LINE Communications (November 2010 - 2012)

I worked for LINE Communications as a lead developer. In this role I lead the technical implementation of projects for clients. Projects vary greatly, often including a variety of different disciplines and approaches to offer an appropriate solution. Numerous languages, frameworks and

environments are often used, and the role has given me a great depth of understanding in technical project development and management.

Typically, this has meant using a Unix environment and frameworks, which I am comfortable with from front-end through to server setup. I have successfully implemented features for custom built frameworks, reverse engineered existing projects, and developed existing deliveries such as MOODLE and Wordpress since my appointment. In using these technologies, there are countless standard languages and techniques that I've worked to. These include PHP, MySQL, XHTML & HTML 4/5, Javascript, AJAX, XML, XSL &XSLT and coding systems such as SMARTY. I have further server experience in setting up and maintaining PHP, MySQL, APACHE, Subversion (including command line operation) and many others. There have been numerous times when Flash (and Flash based Frameworks), Photoshop and similar front end technologies have been required.

During my time I attended various events, such as Sharepoint training to further expand my knowledge.

Peter Howarth Design (July 2010-November 2010)

At PHDI I took a technical role within the management team. My responsibilities included taking the lead for new design and technical concepts for website development. On taking the role I spent a considerable amount of time reviewing and developing their existing out of date solutions. I prepared and delivered a new database driven website to reduce maintenance issues, improve accuracy and revitalise the brand.

During the time I spent at PHDI I was responsible for a substantial amount of modern web and IT issues. I worked with front and back end areas including working with PHP/MySQL development, front end development including Javascript, Photoshop, Flash and branding solutions. I also started to implement IT and web standards, such as documenting best practice, reducing file storage overheads and version control. As well as development and coding, I also performed other company wide admin such as mail and server development and maintenance.

At PHDI I was part of the management team, and hence was able to assist with more companywide decisions. I contributed to many initiatives, offering suggestions, new methods and technical solutions to problems within the company. I was able to develop greatly as a member of a dynamic and creative team, giving me a rounded understanding of the creative and practical processes at the heart of a modern business.

MarkcoMedia (June 2009-June 2010)

Since June 2009 I have worked for Markco Media developing a number of extremely popular sites. The role specifically involved OO PhP and MySQL. In addition to web design and development I was tasked with managing a substantial redevelopment of the bug testing process, as well as extensive 'best practice' development across the board. I also have been assisting in some day to day server maintenance, including SSH, mail admin, domain porting and server tweaking.

Working at Markco Media has given me valuable experience in teamwork and team development. As part of my role I ended up performing many managerial tasks. I feel that this has allowed me to learn and develop substantially as a developer, giving me a rounded understanding of all aspects of maintaining a profitable site.

Floor9Design (2004-Present)

Floor9Design is a company I set up following interest in my casual work which has evolved into a Limited company. Throughout its history it has evolved from some basic casual work through to large professional contracts, as shown by its evolution from sole trader to Ltd status. I have listed many of the larger projects separately previously.

As owner/director, I was responsible for all aspects of the company development. The company offered a "one stop" IT and web design service and was aimed mainly at small business. This involved almost all aspects imaginable from IT including: operating system installation and maintenance (across multiple OSs), hardware maintenance, Custom PC & Peripheral selection and construction, Networking and Network installation, Branding and Image consultation, graphic design, web design, web advertising and general promotion to simply scratch the surface of the company's remit.

During this time, I have learned a myriad of skills across all levels of modern business, from customer relations through to understanding and advising them on their technical needs. Many of my clients were small local business who literally needed a fully rounded "IT Guy" to manage all their needs... whether it be setting up a phone line or developing Google analytics and advertising.

The Usual Suspects (2007-2011)

The Usual Suspects is a stage crewing company operating across many Venues, including Sheffield City Hall, Carling/O2 academy, Sheffield Arena, Nottingham Ice Arena, and Birmingham International Arena. My duties involved execution of many aspects of high-profile shows. My remit included lighting and truss assembly and setup, Audio PA and cabling assembly setup, as well as all other aspects of putting on an arena show.

While not like the job under discussion, I cannot stress highly enough the physical and mental discipline, dedication and control needed to successfully work at this level. There are few jobs with such a high pressure to hit time and performance targets reliably, and with a cool and professional manner. Often shifts can last more than 17 hours, and working sleep deprived is the norm.

I feel that this job has given an invaluable "common touch" toward plain hard graft, deadlines, and work pressure that is unique.

BT (2002-2004)

At BT I worked as a Business Sales Advisor. My duties were answering business calls, including managing technical enquiries, complaints and general customer issues. During this time I developed a professional customer and business manner, as well as experiencing life in a truly dynamic and developing corporation. In this atmosphere I was constantly trained and updated; the telecommunications sector is particularly dynamic and as one of the market leaders our job was to be a reliable knowledgebase for our clients. I have done courses and trained on many elements of modern work practice, such as basic IT, health & fire safety, equality in the workplace, sales and customer awareness. I am regularly complimented on my phone manner and ability to approach and engage in other workers/customers.

University Study Part Time Work (1999-2002)

While at Sheffield University I worked in several Bars and Pubs. Most notably I become a Bar manager at the Sheffield Casbah.

While this was relatively menial work, I feel that it taught me a lot about leadership and attitude in competitive environments. I consider myself a great team player, and my promotion illustrates this.

Education

The University of Sheffield (1998-2002)

BEng in Electronic Engineering (Semiconductor Devices).

Oundle School (1993-1998)

A levels in Maths, Chemistry, Physics. AS levels in Electronics. 4 A-grade and 5 B-grade GCSE's.

Misc Training

Drivers Licence (with vehicle) CB Fork Lift Truck Drivers Licence

Interests & Hobbies

I'm generally interested in technology, and modern technology culture.

I am a physically active and healthy person; I enjoy several sports including Paintballing, Karate, Jujitsu, Cycling, Cricket, Snowboarding, and general Gym work depending on the season.

I have started learning Japanese, as well as further brushing up on my intermediate French.

I also love live music, as well as socialising. I play electric guitar.