

MARK OSBORNE – RESUME

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COMMERCIAL DEVELOPMENT EXPERIENCE

QANTMIP – FORMERLY DAVIES COLLISON CAVE INTELLECTUAL PROPERTY AND TRADE MARK ATTORNEYS

Training Successors

- create and deliver training with respect to all areas of my technical expertise at the company.

Integration of new Time Control System with Legacy Systems

- on a tight deadline, designed, implemented, documented and tested a safe integration of enterprise software with our existing billing software by using project approach standards written by myself.
- the outcome was very successful with only one major bug post-release and built-in ability to easily extend the integration.
- C#, MSSQL

B2B Software Web Project

- design and prototype API-driven ASP WebForms app that integrates with IP Australia and the firm's practise management system.

B2B Software Project

- modifying existing software system by understanding the configuration and software to handle new application types, and present information within an existing framework.
- C#, MSSQL, Visual Studio 2015

Enterprise Software Modification

- profiling and modifying the behaviour of an existing system's functionality to meet business requirements. i.e. generate e-bills for draft invoices.
- identifying the root cause of problems and working with the vendor to fix and release changes to their own system.
- configuring e-billing for the business to meet third party requirements by writing and modifying XSL.
- MSSQL, SQL Server 2008, XSL

MS Word/Database contents into an email with document processing (inline/attachment)

- inject iManage DMS contents into an email with auto-addressing and subject utility for users to take a DMS document and inject it into an email as body, attachment, or both and then allow the case information of the document determine the email's subject and recipients.
- C#, MSSQL, iManage API, VBA

Optimising SQL reports and queries

- convert SQL queries with cursors, joins, cross queries and functions to use temp tables to get 60x performance boost. Indexing then provides even more performance (or aligning the queries to use existing indices)
- MSSQL

Optimising user interface configuration

- designed and implemented an algorithm to determine the best two arrangements of a user's UI to make overall load time most efficient based on required usage of functionality.
- this was constrained by wanting only a small number of possible arrangements to simplify maintenance.
- scored effect of possible arrangements that had to include features users needed
- C#

Levenshtein algorithm to group like-sounding clients

- provide the business with sales and supply figures based on a collection of client records that have similarly spelt names by grouping the name records.
- MSSQL

RFID bridge client

- Two-way connection between production RFID linux system to a production case management system in order to keep the location of and requests for paper files consistent between what was recorded by users in the case management system and the handheld location recorders of the RFID system.
- Delphi, MSSQL, MySQL

System monitor (docgenmonitor)

- monitor the health of servers and services in a way that updates frequently and provides the Tech Services department with up to the minute information on the health of their services.
- C#, MSSQL

Email to case list

- users provided the filing department with five different ways to request files by email.
- implemented a way for the emails to be searched for official numbers and turned into a report with the locations of all required files and other information required by the files department.
- C#, MSSQL

IPAustralia to iManage

- documents available from the national intellectual property office website were downloaded as a zip file, unarchived and manually saved to the local document management system, then reported to relevant operators
- this was automated by accepting the zip file, unarchiving it and automatically filing it to the document management system based on the name of the document.
- generate a spreadsheet with links to the case management system, the document system and automatic email of notifications to relevant operators
- C#, MSSQL, VBA

Used Reflection to Instantiate Dynamic Data-Aware Classes

- by inspecting the properties of data modules in Delphi, I generated the properties of classes on the fly instead of hand-creating classes that accessed the data modules.
- Delphi

Wrote a VBA code Generator

- A document generation engine needed to be migrated to VBA from Delphi. I wrote code to generate about 100K lines of code from the existing code and configuration so the new document generation system behaved similarly to the old one without too much manual work.
- Delphi, VBA

Other Projects

- Development of in-house practice management system using Inprise Delphi 4-6 and Microsoft SQL Server 6.5 – 2008
- Development of in-house billing system
- Legacy system data migrations
- Vendor-supplied product testing, debugging, reporting and enhancement

PC BLUES [HTTPS://PCBLUES.COM](https://PCBLUES.COM)

My personal business for projects

Trevorpay.com

- Developed e-commerce web product from fresh linux server for buying and selling information
- Sharetribe, MYSQL, e-commerce/email integration, search, nginx, services

Performed all tasks associated with bringing two software products to market on the internet.

The Upgrade Suite

- simplify and manage software distribution across corporate networks and the internet
- Delphi

EasyRead

- read large amounts of text on a screen easily
- Delphi

ALLBALLSIN PTY LTD

Co-founded Allballs Pty Ltd to develop and sell iPhone and Android apps

TuneFetcher app

- identified song currently playing on radio, and allowed purchase from Apple
- obtained station website lists and set up scraping software to get the latest songs
- uploaded the songs to a web database where the app obtained current playing information for a station
- Objective C, Python, Python CGI, Selenium, MySQL

fbShoosher app

- removed ads and spoilers from Facebook feed
- scraped and parsed Facebook's mobile web page
- used Javascript to manipulate the DOM
- Objective C, Java, Javascript

RightsFinder app

- schedule searches for copyright and Trade Mark infringements
- Swift version utilised Continuous Integration with Jenkins, git and fastlane
- Objective C, Swift

CarPad app

- record used car evaluations
- Objective C

SAUSAGE SOFTWARE

Startup Software Company

- Programmed on team to develop world-famous web-authoring tool
- Developed an internet file download product (Jackhammer) that was bundled with retail version of Netscape Communicator
- Developed English to Javascript tool
- Developed using Delphi 2 and 3

JLM SOFTWARE

Shareware Distribution Company

- Developed interactive help system to reduce the number and length of phone calls for assistance
- Programmed in C, Formula (Multimedia), and Delphi 1 to create menu systems for the CD-ROMS
- Worked in three-person team to program multimedia CD-ROM magazine using Formula Graphics, Adobe Photoshop, Paint Shop Pro
- Oversaw maintenance of office computer network (virus protection, system back-ups, hardware maintenance)
- Provided technical assistance over phone to customers and retailers for all our products
- Initiated conversion of telephone customer help to a new first contact system of mailed out help sheets covering the most common problems

TERTIARY EDUCATION

BACHELOR ARTS MONASH UNIVERSITY (CLAYTON, AUSTRALIA)

Current subjects

- Scientific Statistics
- Video Game Design
- Anthropology
- Philosophy

BACHELOR COMPUTING (COMPUTER SCIENCE) MONASH UNIVERSITY (CLAYTON, AUSTRALIA)

Final year studies included

- Unix/C large scale software maintenance project
- Data Communications and Networking
- Programming Paradigms
- Fundamentals of programming languages
- Artificial Intelligence
- Databases
- Microprocessors
- Machine Learning
- Computer Organisation
- Software Engineering II
- Computer Graphics

REGULAR LEARNING OF NEW LANGUAGES OR SKILLS

- Aside from progressing personal projects, I learn something new about programming or technology each day.

COMPLETED ONLINE COURSES

Links below go to online certifications.

- [Process Mining: Data science in Action by Eindhoven University of Technology on Coursera. Certificate earned Saturday, July 13, 2019](#)
- [Deep Learning, a 5-course specialization by deeplearning.ai on Coursera. Specialization Certificate earned on March 4, 2018](#)
- [Legacy Full Stack Development - FreeCodeCamp. Certificate earned September 5, 2018](#)
- [Data Visualization - FreeCodeCamp. Certificate earned September 5, 2018](#)
- [Back-End Development and APIs - FreeCodeCamp. Certificate earned August 28, 2018](#)
- [Front-End Development Libraries - FreeCodeCamp. Certificate earned on August 4, 2018](#)
- [Responsive Web Design - FreeCodeCamp. Certificate earned August 4, 2018](#)
- [Legacy Information Security and Quality Assurance - FreeCodeCamp. Certificate earned August 4, 2018](#)
- [JavaScript Algorithms and Data Structures - FreeCodeCamp. Certificate earned on July 4, 2018](#)
- [Legacy Front-End Development - FreeCodeCamp. Certificate earned May 3, 2018](#)
- [Machine Learning by Stanford University on Coursera. Certificate earned on December 6, 2017](#)

PROGRAMMING/DATABASE LANGUAGES

Mostly

- MS SQL since 1998
- C# since 2014
- VBA since 2000

Not so much now

- Objective C since 2011
- Swift since 2015
- Delphi since 1996

Some

- HTML
- CSS
- Javascript
- Python
- Ruby
- Java
- C++
- CGI
- C
- ASP
- XML
- XSLT

Operating Systems

- Mac OSX
- Linux
- Windows

Other Products Used

- MS Reporting Services
- Crystal Reports
- WordPress
- Joomla