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Strengths:

My main innate strengths are:

- **Imagination** - helps with everything; creativity, understanding problems, finding solutions...
- **Critical thinking** - tempers imagination. The two complement each other nicely.

From 20+ years of commercial experience, I have learnt to:

- Thoroughly understand the essences of complex requirements, thereby properly understanding and meeting clients' actual needs. That enables me to...
- Design simpler solutions using proper OO. Simpler solutions lead to simpler architecture, code, testing and maintainability.

I have developed mainly using **Delphi** and **C#** for Windows and Android.

The last few years I've been moving into **Unity** development, and recently been developing for VR.

Work ethic:

Although I mostly work alone, I prefer to work in a team so that we can bounce ideas off each other.

As a quality conscious person, my code is well structured, modular, tidy and well commented.

I strongly avoid shortcuts because they usually cost more than they're worth, even in the short term.

I am creative, enjoy making things work better and tend to come up with novel and inventive solutions, but I've learnt to not go overboard.

I live and work, to the best of my ability, by a philosophy of respect for all and expect the same in return.

Also, I enjoy mentoring, which I have done at a few workplaces and for several years at UWA, and I often do presentations at the Australian Delphi User Group in Perth.

Who I am:

I like new ideas (scientific, social, etc.) and escapism (fantasy/sci-fi worlds). I practice northern shaolin and wu tai-chi, play board/RPG games and computer games, brew mead and kombucha... and fare better with later mornings and working more efficiently.

And when people have some coding conundrum, I can't help finding a solution.

History:

Born in Sweden, I started programming when 12. Moved to Australia where I got a **B.Sc.** at **UWA** in Computer Science and Information Technology before working in software development for about 20 years in **Australia, Sweden and Taiwan.**

A few years ago, I studied **games development** at **TAFE** (which is mostly art: 2-D, 3-D, animation, compositing, etc.).

Developing games was so much more fun than I anticipated. Finally, my imagination got to flourish!

Now I want to work in Unity general, whether that be for engineering, education or entertainment.

Project History (*mostly* ordered by latest start date, returned to some workplaces, some overlap)

BatSoft (Perth, Australia) 2004-08 – Present

BatSoft is my own business name (sole-trader). I have been working on and off on a couple of projects:

- BatSoft Library is my personal Delphi library, now available on GetIt. It contains routines and libraries that I've found extremely useful in just about every Delphi project I've worked on over the years.
- TreeNotes is a very handy organisation tool. TreeNotes began as a MIDlet. When J2ME was not supported enough I rewrote it in C# for WinMo 6, but then Microsoft discontinued WinMo.
- Morph Protocol. This is was an offshoot of TreeNotes as I needed a powerful but light application-level protocol that did not require web services being hosted on mobile phones. My marketing skills are somewhat lacking, but Morph became more powerful than I anticipated. There is a working proof of concept written in C#.

Environment: Delphi XE5-10.4 using FireMonkey, unit testing, Subversion, GIT, Java (J2ME), Borland JBuilder, Eclipse, C# Visual Studio 2005/2010 (WinMo, Windows, Mono for Android)

Nonlinear Solutions (Perth, Australia) 2021-05 – 2021-05

Was contracted to develop a proof-of-concept engineering tool to be displayed at an engineering expo for visualising and interacting with engineering equipment. Handles multiple sources of input. Works out camera angles. Modular such that new models can easily be put in and the UI dynamically reflects that.

Environment: Unity 2020.3

CompAdvantage (Perth, Australia) 2020-12 – 2021-04

I was contracted to document the software architecture of a complex engineering calculation application called SeleXpress.

Environment: Delphi 10.4

Telstra Health (Perth, Australia) 2018-07 – 2019-11

I was hired to guide the modernisation of a rather successful patient management application (Communicare) that is over 20 years old and has grown into a Delphi and C# hybrid.

Environment: Delphi 2007, Visual Studio 2017

RMT (Perth, Australia) 2011-09 – 2014-10

I was back at RMT, this time adding modules to CADE and doing refactoring of the core codebase. Wrote a multi-process report conversion tool for upgrading reports, and applied upgrades to their reporting tool.

Environment: Delphi XE2-XE7 using VCL, Oracle, Subversion

Configurable Software Solutions (Perth, Australia) 2009-08 – 2016-01

- Mostly I have been maintaining the CPR application (Configurable Product Reporting). CPR is a configurable data driven database application.
- Designed and developed HeartBeat to replace CPR. HeartBeat is an *extremely* configurable data driven database application.

Environment: Delphi 7/2009/2010 using VCL, Delphi XE5-10.1 using FireMonkey, Microsoft SQL Server, Subversion

Meercat (Perth, Australia) 2007-06 – 2008-06?

I was upgrading and maintaining existing products but also writing new ones to replace the old.

I remember one of them being a data extractor that generated files in 12 seconds instead of the 20+ minutes that the old one took.

Environment: Delphi 7, Oracle, XML

Fortescue Metals Group (Perth, Australia) 2007-11 – 2008-04

As the business analyst (not an IT job) working on FMG's identity management (the flow and control of "person information" throughout the organisation), I researched the current state and, based on that, designed an identity management solution including procedures, provisioning rules, selecting an appropriate software solution for data migration, and so on. I finished off with writing the requirements and functional specification of a provisioning software solution that was going to be implemented by a 3rd party as part of the complete identity management solution.

Environment: MS Office, Visio,

RMT (Perth, Australia) 2006-12 – 2007-10

- Redesigned and rewrote parts of RMT's report designer to make it (very much) more efficient and to extend its functionality and make it more user-friendly. (Minutes to 1-2 seconds.)
- Wrote a conversion tool for upgrading the reports. With the DBA we made it able to run in multiple instances cooperating in parallel to hasten conversion.
- Also made a new, lean report service to replace the old one, thereby ending a cycle of bugginess.

Environment: Delphi 5, Delphi 7, Oracle, Toad, Turtle, MS Office, Visio

Motorola (Perth, Australia) 2005-10 – 2006-04

On a distributed video encryption application for ISP's, which was mostly written by the time I joined, I was assigned to be the test lead and release builder. Motorola Perth was in the process of acquiring a CMMi 5 qualification, and so had a very high standard of software development.

Environment: Java (J2SE), Eclipse, Unix (incl. scripting), ClearCase, Ant, Lumbermill, MS Office

XempleX (Perth, Australia) 2004-10 – 2005-10

Using the XempleX application, users design dataflow diagrams and then execute them. This tool makes it easy, and visual, for users to design data flows and do data crunching.

- My task was to enable the XempleX application to consume any Web Service. So, carefully adhering to W3C standards I built a modular library that implements WSDL, SOAP and to some extent XML Schema. Using this library, we made plug-in components and Wizards that enable users to select and use any web service they choose.
- I also wrote new Delphi variant types to enable the XempleX application to handle complex data.

Environment: Delphi 6, Delphi 2005, SOAP, WSDL, XML Schema., XML, MS Word.

Karjeni (Perth, Australia) 2004-08 – 2004-10

- I built an application which burns backups onto CD and sends a user entered summary to a central web service. The summary details, and thus the GUI for entering these details, are customisable from the web server.
- I built importer and exporter plug-ins with GUIs to use read/write tables in binary file formats.
- Blast Refinery is an application for examining mining blasts. I added forms for synchronised viewing of a diagram and high-speed video.

Environment: Delphi 5, Delphi 7, SQL Server.

RealTime Computing (Perth, Australia) 2004-07 – 2004-07

Continued on the decision system and the string generator projects developed in 2003.

Environment: Delphi 7, XML, SQL Server, MS Word, MS Visio.

eBsuccess (Hsinchu, Taiwan) 2003-09 – 2003-12

(Perth, Australia) 2004-01 – 2004-06

eBLoadtest is an application suite for load-testing web-servers. The suite consists of four applications. As senior architect I designed and implemented the core and built the application that runs it, plus an HTTP adaptor (plug-in module). The core is designed to be extendable so that new adaptors can easily be added. It makes heavy use of threads and collects measurements taken from these threads in an efficient way. The HTTP adaptor meant I had to implement parts of the HTTP protocol, cookie handling, HTML and other web related technologies.

Environment: Java (J2SE, Swing), JBuilder 9, HTTP, HTML, XML, MS Word, MS Visio.

RealTime Computing (Perth, Australia) 2002-11 – 2003-08

- Designed and implemented an editor and an evaluator* for a decision system (ie. flowcharts). Highly modifiable using suites of plug-in packages.
- Designed and implemented an editor and an evaluator* for a string generator (primarily XML). Highly modifiable using plug-in packages.
- Built a SOAP service to which I plugged in a ready-made quoting engine.
- Split an application developed using RAD into more manageable modules.

* Whereas editors are used to create and edit documents that describe processes, evaluators execute these documents. By using plug-in packages and information files, I was able to make the applications truly modifiable, even during runtime. Since the evaluators in these projects were built into services, the ability to update during runtime may prove vital.

Environment: Delphi 7, XML, SQL Server, MS Word, MS Visio.

Marotz AB (New name: Spree AB) (Stockholm, Sweden) 1999-07 – 2002-05

I was a consultant at Marotz AB (now Synaptic AB) from 1999-07 to 2002-05 during which I worked both on in-house projects and as a consultant for Marotz AB at customer sites.

Marotz AB (Stockholm, Sweden) 2001-10 – 2002-04

- Built a course planning and booking system for the Marotz intranet using WebSnap.
- Built a web application intended as a public database of Swedish web services.
- Built a web service that does unit conversion.
- Composed a source library of Marotz code making both a VCL and a CLX version of it.
- Extended the source library with a Delphi code generation expert.
- Held workshops on WebSnap and OOP tips and tricks

Environment: Delphi 6, Interbase.

Marotz AB (Stockholm, Sweden) 2001-04 – 2002-05

On and off, I have been writing a detailed instruction book on Object Orientated Programming for Delphi ranging from the basics of OOP through to advanced tips and tricks.

Environment: Delphi 5 & 6, MS Word.

Fritidsresor (Marotz AB) (Stockholm, Sweden) 2001-09 – 2001-10

Modified a database and a set of smaller applications used for keeping statistics of travel habits.

Environment: Delphi 5, Interbase.

Iquity Systems (Marotz AB) (Stockholm, Sweden) 2001-05 – 2001-08

Marotz has helped build a suite of products for free call telephone advertising. I did maintenance work on these applications including GUI design, adding FTP functionality, debugging and enhancing. I also made two applications for testing server applications and proof read documentation.

Environment: Delphi 5.

Upplysnings Centralen (Marotz AB) (Stockholm, Sweden) 2000-12 – 2001-04

Made a tool for automating data conversion in the 2To1 project. The tool being developed converts an old database to COM objects and then saves the COM objects to an arbitrary database. I also worked on the application that is built upon the COM objects. The work on this project included implementing business rules, debugging, optimizing build process, exporting reports to MS Word, MS Excel, Bonanza and graphs.

Environment: Delphi 5, COM, SQL, MS Office.

EDS (Marotz AB) (Stockholm, Sweden) 2000-08 – 2000-11

Marotz was involved in a gradual upgrade of a multi-user database application for keeping track of Bostadsrättsföreningar that are members of Riksbyggen. I developed dynamic database access components with an event multiplexer component, forms and settings classes with a dynamic interface that made it very easy to add new properties using RTTI and documentation.

Environment: Delphi 5, SQL Server, ADO.

Geni Data (Marotz AB) (Stockholm, Sweden) 2000-08 – 2000-08

Marotz developed the customer documentation for Geni Data's Point of Sale System. I assisted in translating Swedish documents to English.

Environment: MS Office.

Auto Diagnos (Marotz AB) (Stockholm, Sweden) 2000-06 – 2000-06

Auto Diagnos developed an instrument for diagnosing errors in car engines. Marotz has been involved in developing separate DLL and interface specifications, making it possible for the customer to connect the system with their own applications. I made a design analysis for a DLL interface used for a hardware device and produced two design specifications.

Environment: MS Office, Delphi 5.

Marotz AB (Stockholm, Sweden) 2000-06 – 2002-05

Between client projects I worked on a database application (KnowledgeBase) for holding code, examples, references, documentation, projects, etc. I also made components, controls, classes and other general code for the Marotz library to be used in KnowledgeBase.

Environment: Delphi 5, Interbase, Windows 98, TCP/IP.

McDonalds (Marotz AB) (Stockholm, Sweden) 1999-10 – 2000-08

I assisted in development of a scheduling and human resource application for the Swedish McDonald's restaurants. I wrote technical documentation and made utilities and database handling more object oriented. I also developed database integrity and data validation modules.

Environment: Delphi 5, Interbase, Windows 98, LAN.

Marotz AB (Stockholm, Sweden) 1999-07 – 1999-10

Worked on design and development of a multi tier time reporting system. I built and maintained the client application for this system.

Environment: Delphi 4-5, Interbase, Windows NT, Windows 95 & 98, LAN, Internet, TCP/IP.

Bunnings, Execom, Romteck... (Perth, Australia) 1996-09 – 1999-05

Software development and Delphi advisor.