Malte von der Lancken-Wakenitz
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Introduction

I have been programming computers since 1982. During 35+ years I have acquired extensive experience in data modeling, persistence, inter-process communication and UX design. I have developed numerous complex systems, some as part of a team, others solo.

I have a university background in Mathematics, Applied Mathematics, Statistics and Physics. I am fluent in English, German, Afrikaans and to a slightly lesser extent Spanish. I was born in Regensburg, Germany in 1966 and currently live in South Africa. I have German and South African citizenships.

I am currently searching globally for a new software design challenge in which I can put to use my extensive data modeling and rule based software architecture experience.

Experience

ReactorWare ⟶

Owner, System Architect
January 2000 – Present • 22+ yrs
Pretoria, South Africa

ReactorWare develops a bespoke Intellectual Property Administration System for Hahn & Hahn Inc. I am the developer and maintainer of this system. It has had two major iterations. First as a Java Desktop Application deployed via WebStart and currently as a Web Application accessing a REST API with a single endpoint and syntax similar to GraphQL. The system consists of a proprietary Graph Database backed by PostgreSQL, Apache, Tomcat and Drools. The system's data model, rules, functionality and configuration can rapidly be altered due to the combination of a schemaless graph database and rule engine.

Medocx

Software Developer, Java, Drools
2019 – 2021 • 2+ yrs • part time
Pretoria, South Africa

Initially I developed a Vue-NativeScript mobile application prototype. From 2020 onwards focus shifted to the design of a medical ontology system. I am part of a team of developers and specialist medical professionals. This collaboration has been very successful at the design phase. Currently there is a prototype system mainly used to test concepts. It utilises a graph database and rule engine back-end, exposed via a REST API with an HTML / JavaScript front end.

MedEDI ⬀
Software Developer, Java
2008 – 2011 • 3 yrs
Margate, South Africa

MedEDI is a suite of software products for the South African medical industry. It efficiently transmits medical aid claims, based on consultation data, via a national switching hubs, to participating medical aid schemes. These are then validated and a response returned to the origin of the claim. The system massively reduces bad debt for doctors due to medical aid claim abuse and fraud. I was contracted to assist with a move from a memory database system (HSQLDB, if I recall correctly) to PostgreSQL. This I did successfully. During this initial collaboration it became apparent that a graph database technology I had been developing would be a good fit for some aspects of the MedEDI software and I was commissioned to build a Java implementation of such a graph database. This used a PostgreSQL server for persistence and a Java middle-ware to implement the graph model. This was very successful and is still in use today. All work was carried out as part of a teeam of 5+ developers.

ITS Abacus
Software Developer, C++
1998 – 2000 • 2 yrs
Pretoria, South Africa

This software was a specialised time-tabling system. It used an advanced rule engine/optimization library – ILOG – to calculate optimal solutions for timetables of universities, schools etc. It considered many constraints, relating to course, venue, staff, time and cost. Initially I was one of two developers. I focused mostly on the development of the desktop application, it's user interface and communication with the solver module. This was asynchronous and could incrementally update the UI as solutions were being calculated. The code-base was all C++. At a later stage a mathematician and other developers joined the project as it grew in complexity.

Multiple
Software Programmer
1992 – 1998 • 6 yrs
South Africa, Germany, United Kingdom

I worked on numerous projects, including AutoCAD scripting, SCO Unix Bulletin Software development and maintenance, CRM software built with PowerBuilder, stock exchange ticker communications programming using TIBCO APIs and many more.

Billcost ⬀
Software Programmer
1989 – 1992 • 3 yrs
Pretoria, South Africa

Billcost was then an innovative DOS based costing system for the South African building industry. It was originally written in TurboPascal, an early OO language. I specifically worked on all data base related aspects. The database was a custom B-tree index implementation. The software has since undergone many iterations and is still in use today, as a modern Windows application.

Skills

Industry

Software Design & Development
Complex Data Modelling
Graph Data Bases & Data Models
Business Analysis
Business Rule Management Systems
User Interface Design & Development
Mobile Application Development

Languages

Java	20	years
C/C++	7	years
JavaScript	6	years
Visual Basic	2	years
SQL	26	years
NoSQL	12	years
Perl, Bash, LISP, Visual Basic, PowerBuilder, Delphi, TurboPascal, Clipper, dBase, COBOL, FORTRAN		

Technologies

XML, XSLT, XSD, XPATH, JSON, HTML, CSS, DRL, REST, AJAX, SOAP, SQL, NoSQL, Swing, NodeJS, Knockout.js, Vue.js, NativeScript, RabbitMQ, Drools, Docker, PostgreSQL, Apache, Tomcat, SQLServer, Access, vCard, ILOG, AutoCAD

Systems

Linux OpenSUSE	20	years
Windows	12	years
DOS	10	years

IDEs

NetBeans	16	years
Eclipse	3	years
Visual Studio	3	years
VSCode	2	years

Version Control

Mercurial, Git, Subversion

Education

The Glen High School, Pretoria
1980 – 1984
South African Higher Grade Matric

University of Pretoria
1985 – 1987
I studied for three years towards a Bsc in Mathematics, Applied Mathematics, Mathematical Statistics and Physics. I did not complete the third year of the course and started to work as a programmer.

References

References will be supplied on request for ReactorWare, Hahn & Hahn Inc., Medocx, MedEDI, ITS Abacus and Billcost. Due to my long working career I do not have a means of reaching some former colleagues and employers.