### Presentation of Qualifications Berend de Boer

# Personal information

DOB	31-Oct-1970
Marital status	Married
Nationality	New Zealand
Title	Master of Science in Technical Informatics
ACM and IEEE member	
email	berend@acm.org

## Skills

I have over 25 years of professional IT experience ranging from coding to internet architecture design. I'm not only interested in the technical side of writing complex software, but also in the software engineering side of it: how to do this with a reliable outcome and how to do it in such a way that a large number of programmers can work together productively.

Software	Level of experience
Engineering	
Drupal	First Drupal programmer in NZ, started using Drupal 8 when it was in beta (about 3 years ago).
AJAX	Strong (including frameworks as jQuery, ExtJS, YUI, and Prototype)
Build and smoke-testing	Strong
<b>REST</b> architecture	Strong
Peer review	Good
Source code control	Strong (GIT, Subversion, Perforce)

Content Management Systems	Level of experience
Drupal, used since 2004	Extensive
WordPress	Intermediate
Joomla	Intermediate
SilverStripe	Some
Language	Level of experience
CSS	Strong
Delphi	Very high (I'm Borland Delphi Client/Server Certified engineer), used from Turbo Pascal 3.0 up to Delphi 2006
Eiffel	Very high (I won a Silver Award at the <b>Eiffel</b> <b>1999 Struggle</b> and a Gold Award at the <b>Eiffel</b> <b>2000 Struggle</b> ); I organised the International Eiffel Programming Contest 2003 and 2005. Programmers from three different continents have participated in this.
JavaScript	Strong
Perl	Intermediate
РНР	Good
Python	Intermediate
$\operatorname{SQL}$	Very high
Unix shell	Good
Xplain	Guru
HTML5	Very high
XSLT	Very high

Database	Level of experience
PostgreSQL	Strong
${\rm Microsoft}~{\rm SQL}$	Very strong (I'm a Microsoft SQL Server
Server	Certified Product specialist), from version 6 up to 2005 including the cluster server fail-over edition
MySQL 5	Strong (including setting replication scenarios)
Protocols	Level of experience
FTP	Good (implemented FTP client)
IMAP	Intermediate (implemented IMAP client)
IRC	Intermediate (implemented IRC client)
HTTP	Strong (implemented HTTP client and server)
LDAP	Some
SMTP	Good (implemented SMTP client)
Operating	Level of experience
Systems	
GNU/Linux	Strong
FreeBSD	Good
Windows	Good, from Windows NT 3.5 to Windows 2003 Server

# Employment history

Novem- Xplain Technology Ltd, Auckland

- ber 2007 Worked on many Drupal projects for numerous New Zealand and overseas companies (Australia, Canada, America, The Netherlands):
  - 1. Worked on part of large dataware house project to export six greenhouse sites running Priva software into SQL Server for Turners & Growers. Software was written in .NET Core and developed on Linux.
  - 2. Developed site to let companies test knowledge of safety procedures via gamification for Blu Print.
  - 3. Taking over development of the Team Challenge website for Blu Print.
  - 4. Taking over development of the Liteclub website for Project Litefoot.

- 5. Building a crowdfunding site for open source projects (like kick-starter) for **Cvalka**.
- 6. Worked and working on various Drupal websites built by **Big Bridge** such as **Queensland Country Health Fund** and **Brown Consulting**. Implementing a complex workflow solution for **Office of the Information Commissioner**.
- 7. Maintain and monitor the hosting of **interest.co.nz**, New Zealand's largest financial news site.
- 8. Migration of **www.amnesty.org.nz** from Drupal 5 to 7; added deep supporter integration between front-end and backend.
- 9. Migration of the MomCentral site, one of the largest ``mom blogger'' sites, and 16 associated blogs from typepad to Drupal.
- 10. New website for Eclipse Textiles.
- 11. For Thompson Publishing (a \$500 million USD company) I developed the **AHC Media testing site** and worked on **Smart HR manager**.
- 12. Through Sparks Interactive, New Zealand's largest Drupal company, I worked on National Business Review (high traffic Drupal web site), The NZ Retirement Commission (Drupal website with most number of users in NZ) and Eco Events.
- 13. Converted **Amnesty International NZ** site to Drupal. This is one of the sites I host as well.
- 14. Through **Tribal DDB** worked on sites for the Child Cancer Foundation and **McDonalds ili card**.
- 15. Developed sites such as **Salesnet Australia** and Mobicon Systems.

Work covered all areas of Drupal such as custom modules, payment processing, data integration, Drupal themes.

Non Drupal work was done for online hotel booking site **ezibed.com** (hotel information and bookings integration between various partners using OTA XML messages) and **Nayler Recruitment Services, Australia** (ColdFusion).

I also was involved in various SugarCRM Pro projects.

Setup various sites and configurations on Amazon's EC2 with automatic backups, master/slave replication and load balancing.

Novem- Xplain Hosting, Auckland ber 2008 – ber 2008 -

Xplain Hosting provides customers with high quality Drupal optimised hosting on the Amazon EC2 cloud.

Septem- Automatem Ltd, Auckland

Worked for various customers of Automatem on custom PHP, Joomla and Drupal sites. Work involved:

- □ Optimising websites both from a server and customer perspective by handling much more customers on a server, or dramatically improving the website loading time for customers.
- Customers included interest.co.nz, Philips Selecon, Freshco, Sportcheck, NakedBus and 3deals.
- □ Enhancements to web applications used internally by various companies.

May 2007 – OE.tv, Auckland

November 2007 Suggested to OE.tv that they rebuild their current website in Drupal as their current website was build with custom PHP code and custom JavaScript.

Was subsequently contracted by OE.tv to do exactly that. The website is a website for travellers where they can upload videos, photos and stories and leave a trail of their travels to friends and family.

Other responsibilities were setting up the source code repository (svn) and issue tracking system (TRAC) and interviews with prospective employees.

#### Dec 2006 – PlayAll, Germany

Oct 2007

Build a game server scheduler for PlayAll. Given constraints of available servers, expected load and maintenance times and of course the number of players and the online games they want to play, the server schedules the game on a physical resource. The game is automatically rescheduled to a different resource of the scheduled resource experiences an outage.

The scheduler is written in Kylix 3 and Delphi 2006 and deployed on both Windows and GNU/Linux servers.

Also build a system that gives instant awards to players based on events in the game. Examples are shooting two people in a row, or disarming a bomb.

- Apr 2006 Web development for Freedom Technologies, Ontario, Canada
  - Aug 2007 Freedom Technologies is a company that sells top quality, highly configurable servers and ships them world-wide.

Key accomplishments:

- □ Using their product and configuration database I came up with a unique configuration tool that lets customers easily configure a server.
- $\Box$  Customers receive instant pricing for the configuration in any currency they like.
- □ FedEx shipping quote integration: customers receive instant shipping costs for their selected configuration.
- □ The new system uses Eiffel (CGI), HTML, XSLT, XML and JavaScript.

Apr 2004 – Software Engineer at XSOL Ltd., Auckland, New Zealand

Nov 2006 XSOL is a company developing solutions in the Business Process Management System space. XSOL was in the top 3 of fastest growing IT companies in New Zealand according to the Deloitte/Unlimited 2005 index.

Key accomplishments:

- □ Worked on rewriting parts of XSOL Automation into Microsoft .NET 2 using C# and using HTML as front-end. Back-end was Microsoft SQL Server 2005.
- □ Worked on various parts of XSOL Automation, XSOL's product for running a business that has been designed by XSOL Mapping. XSOL Automation was originally developed in Delphi 6. I developed entirely new parts such as support for accumulators, and on smaller parts such as integration with Active Directory and Microsoft Office 2003 products.
- □ Implemented XSOL Integration, a system that integrate different data sources by keeping them in sync. It captures modifications made in one system and through a dependency network updates other systems. The system was designed and written in conjunction with Auckland University. Project leader was John Grundy, professor of Software Engineering.
- □ XSOL Integration is written in ISE Eiffel 5.6 and is database independent. It uses Microsoft Message Queue for sending SOAP messages between subsystems.

- □ XSOL Integration is XML based. Data sources are assumed to be XML document and through XSLT data sources can be transformed into any other format. XML was stored in a relational database (Microsoft SQL Server 2000); Designed the structure to store XML in a relational database.
- □ User interface is completely HTML based and uses the Ajax approach at various stages to achieve a richer UI.
- □ XSOL Integration also supports SQL Server fail-over clustering.
- Apr 2004 Started a new company, Xplain Technologies Ltd.
- Feb 2004 Program conversion for Priva B.V., De Lier, The Netherlands
- July 2006 Priva is the word market leader in process automation for indoor horticulture. I worked for them as an independent contractor on a fixed price contract.
  - □ Translated several key Paradox based products to InterBase 6. These programs were written in Delphi 6.
  - □ This included translating the database from a Paradox schema to an InterBase schema.
- May 2001 Software Engineer at Ortec Taxion, Gouda
  - Mar 2002 Adapted Ortec's system for international transport to individual public transport.
- Oct 1999 Software Engineer at Ortec International BV, Gouda
- May 2001 Worked for Ortec International, a 200 person company. Ortec creates products and services around Operations Research knowledge.
  - □ Worked for the Ortec Systems department that creates software for international transport. The software is targeted at large companies with 3 or more concurrent planners and 50 or more trucks.
  - □ Redesigned and rearchitected the planning input part of their solutions for (international) transport. This included design of a 3-tier technical architecture, and design of the data model using Xplain technology (see list of publications).
  - □ Implemented key parts of this architecture with Delphi 5, Microsoft Transaction Server and Microsoft SQL Server 7.0.

- □ Managed a varying number of people who worked on this part. This included explaining n-tier architecture and creating detailed designs.
- □ XML is used to communicate between subsystems and software from other vendors. Written various DTDs and XML Schema's to specify these XML messages.
- $\Box$  Wrote the design and implementation for the data warehouse that is part of this system.
- □ Initiated search and proposed a new source code control system (Perforce). Implemented transition and trained people. This system is currently only in use at Ortec Systems BV, but it is expected that deployment will be company wide.

#### Apr 1998 – Technical architect at Kwetters Automatisering BV, Veenendaal, The Sep 1999 Netherlands

Kwetters develops software for wholesale traders in the food. Kwetters is developing a new system, based on n-tier architecture principles, to replace a DOS based system. Cost of development was approximately USD 1,000,000. I was responsible for the software process used to develop the system and the architecture of the system itself.

- □ Technical design of Kwetters new n-tier system. Design of database, business objects and database queries. The system is database independent. It is developed using Visual Basic 6, Microsoft SQL Server 7.0 and Microsoft Transaction Server. It consists of over 200 tables and over 100 business objects.
- $\Box$  Managing a team of 4 programmers and 1 trainee.
- □ Setting up a defined software process using the Capability Maturity Model.
- □ Introduced peer reviews, both design and code reviews.
- □ Introduced source code control (Visual Source Safe).
- □ Introduced prototyping as a tool to communicate with customers and developers.
- □ Setting up a software process measurement program. Most important question was to measure how long it did take to develop a business object and to create a design.
- □ Creating functional requirements specifications, together with customers of Kwetters.

- □ Developed a prototype web based application to show how wholesale traders could use the Internet for business-to-business communication with their clients. This at a time when there was discussion to use a file transfer based application. This eye-opened Kwetters senior management for the Internet as a business-to-business sales channel. It convinced them to start developing an Internet Front Office application.
- □ Talked to and reviewed ISP's wishing to host this Front Office applications.
- □ Written strategic documents for Kwetters senior management outlining how the Internet will change the wholesale food business and what things Kwetters could do to play a role in this.
- □ Tasked with interviewing candidates applying for positions at Kwetters software department.
- May 1996 Technical manager at ASC Software Technologies, Amsterdam, The Mar 1998 Netherlands

ASC writes vertical market software, almost always using their standard customer and contact management kernel.

Key accomplishments:

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- □ Responsible for the technical design and implementation of many projects and had an advisory role in all others.
- □ Designed and developed version 3 of this kernel for SQL Server and Delphi, using form inheritance, custom components and advanced SQL Coding. A new custom contact management system now takes only 3 hours!
- □ My main project was the design and development of an administrative system for the largest flat-fish auction in Europe. It used the contact management system as its base, extended with the ability to store objects of type 'Ship'. Especially challenging where the complex cost calculation pieces.
- □ Worked on two different data-warehousing projects (for Urk Fish Auction and Cytec Industries in Rotterdam). Urk Fish Auction used Cognos/PowerPlay, Cytec Industries used a combination of reports

written with QuickReport and web-based reports. For Cytec Industries, data came from a heavily customized BPCS application running on an AS/400.

□ Tasked with interviewing candidates applying for positions as programmer.

Dec 1994– Manager BackOffice systems at NRS, Zaltbommel, The Netherlands

- May 1996 NRS develops and sells POS (Point-Of-Sale) and BackOffice software for supermarkets and other retail branches.
  - □ Designed and wrote the most important parts of a loyalty card system (like Airmiles). The system consisted of a fully distributed and replicated database (with logging and auditing), custom developed as it had to run on DOS. Synchronising the database occurred at night using an ISDN WAN or modem lines.
  - $\Box$  Introduced source code control (RCS).
- May 1994 Started my own company, NederWare. Since march 1996 until 2002 every position I have hold has been as a contractor.

## Education

### Technical University Delft, The Netherlands

Master of Science in Technical Informatics (1989–1994).

#### Van Lodenstein College

Secondary education (VWO) at Van Lodenstein College, Amersfoort, The Netherlands (completed in 1989)

### Publications

- □ Article ``*Converting Delphi Forms to XML and Back'*', published in The Delphi Magazine, June 2006.
- □ Article that proves that **REST based web architectures can use pure HTTP authentication** and support all login and logout use cases.
- $\square$  Paper about conversion of ConT<sub>E</sub>Xt code to HTML, published in Free Software Magazine, issue 2.
- □ Article ``*Generating XML*'', published in The Delphi Magazine, January 2002.
- $\Box$  Gave two tutorials at **euroT<sub>E</sub>X 2001**. The first was about XSLT, the second about Makefiles.
- $\Box \text{ Presented a paper about conversion of ConTEXt code to HTML at euroTEX 2001.}$
- Presented a paper about converting Xplain to SQL at IASTED 2001, Innsbrück. This paper publishes joint research of Delft University of Technology and NederWare, February 2001.
- $\Box$  Started column about pdfT<sub>E</sub>X and ConT<sub>E</sub>Xt in the MAPS, the publication of the dutch T<sub>E</sub>X user group, 2000.
- □ Article `` $ConT_EXt$  for  $I_AT_EX$  users'' in MAPS (magazine of the dutch  $T_EX$  users group), Spring 2000.
- Speaker at Inprise Developers Conference July 1999 in Philadelfia, USA. I presented two sessions. The first session discussed using and extending Outlook from Delphi applications. The second session discussed writing MS SQL Server stored procedures in Delphi.
- □ Article ``Integrating with Outlook'' about integration of Outlook and Delphi, published in The Delphi Magazine, September 1998.
- □ Article ``*MS SQL Server Extended Stored Procedures with Delphi*'', published in The Delphi Magazine, March 1998.
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