

# Curriculum Vitae

## Paul Richard Gowers

Consultant with 21 years of software development experience

TDB Software Ltd.

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### Skills Summary

<b>Relational Database</b>	<b>19 years</b>
Oracle 10g R2, 9i, 8i, 7 , SQL Server 2000, v7, Mysql, Informix, TOAD Excellent design, SQL, stored procedure skills (PL/SQL and T-SQL), SQL*DTS	
<b>Design Skills</b>	<b>15 years</b>
Database design (transactional and data warehouse), process design, client/server, object oriented. Entity modeling, data flow, state transition	
<b>Teaching</b>	<b>8 years</b>
Qualified Learning Tree instructor teaching Oracle PL/SQL and Perl courses	
<b>Internet/Web</b>	<b>8 years</b>
Perl, XML, XSLT, MPEG7, ASP, JavaScript/Jscript, Oracle Webserver, HTML, Frontpage, Dreamweaver	
<b>3GL</b>	<b>21 years</b>
'C', Perl, PL/SQL, Pro*C	
<b>Reporting Tools</b>	<b>4 years</b>
Business Objects v6, v5, v4. (Designer, Reporter, Supervisor) , Web Intelligence v2.5	
<b>Platforms</b>	<b>17 years</b>
Unix (Linux, Solaris, HP-UX, OSF), Windows 2003, XP, 2000	
<b>Office</b>	<b>8 years</b>
Microsoft Office 2000, 97 (Access, Excel, Word, Powerpoint) including VBA in Excel.	
<b>Other</b>	
Working knowledge of Java, Visual Basic and C#	

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### Client List

Oracle  
Learning Tree  
Glaxo Smith Kline  
SpinVox  
BT  
General Electric  
EDS  
Rank Xerox  
Miramedia  
River Island

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**SpinVox Ltd**  
Marlow, Bucks

***Contract Software Engineer – 03/2009 – 07/2009***

- Designed and built tools and intranet web site for analysis of messages to identify common text patterns. Implemented in Perl using Mysql, Apache2 and Linux.
- Re-styled intranet web site using CSS2. The site was written by another developer using Ruby on Rails, but was poorly received by users. Built a new CSS for menus, re-styled all pages using CSS.

**Glaxo SmithKline**  
Brentford, Middlesex

***Contract Technical Architect – 02/2008 – 02/2009***

- PL/SQL development using Oracle 10G release 2 on Windows 2003 servers to migrate an Agile 8.5 database to Agile 9.2.2.3 database by moving data between fields, change field types such as text to list, mapping data via lookups for 130 fields. Use of dynamic SQL and manipulation of Agile 9.2.2.3 data dictionary.
- Designed and built suite of 35 XML stylesheet documents (XSLT v2) to extract, filter and sort data from Agile ACP exported XML files to support Agile configuration comparison using windiff.
- Wrote SQL data extracts against Agile 8.5 and Agile 9.2.2.3 databases in preparation for data migration
- Oracle database tuning work to drastically improve slow running queries.
- Liason with offshore development team in Hyderabad, India.
- Documentation using GSK internal standards (iQMS) that are regulated by FDA and other pharmaceutical regulatory bodies.

**Learning Tree International**  
Central London

***Contract Consultant – 01/2001 - ongoing (5-10 weeks per year)***

- Freelance instructor for Learning Tree International, teaching three courses: “Oracle 10g PL/SQL Programming”, “Introduction to Perl Programming” and “Database and Web Programming in Perl”. In addition to technical skills, this role requires excellent communication and presentation skills, class, time and people management. Paul is in Learning Tree’s top grading range based on class evaluations.

**SpinVox Ltd**  
Marlow, Bucks

***Contract Software Engineer – 05/2007 – 02/2008***

- Perl and ‘C’ software developer with some C# support. Developed several SMS sender modules for communicating with customer systems. Modules are run using Daemontools on Linux, and fetch messages from mysql database using DBI and send SMS messages using Net::SMPP. Some programs have to work asynchronously to respond to server ‘keep alive’ requests, so required signals and alarms.
- Significantly enhanced ‘C’ SMS server program to make it multi-threaded to improve throughput and to make it utf8 compatible to handle foreign language messages. Program acts as SOAP server (via Gsoap 2.6), to accept incoming messages via SOAP, breaking them and storing them in mysql database for later processing.
- Developed several new web pages (Perl/CGI) for monitoring and controlling SOAP servers. Basic input/output using HTML fields and server communication via Perl SOAP::Lite module.
- Database tuning work to improve slow running queries in Informix.

- Improvements to message injection and ejection Perl programs to cater for specific requirements of new customers (usually custom email header parameters).

## **Versatile Delivery Systems**

Harrogate, Yorks

### ***Technical Director – 06/2006 – 04/2007 (full time)***

- Continuing in similar role as consultant, but on a full time basis as V.D.S. gets new software developed and launched. Paul is a shareholder in this business.
- Liason with offshore development team in Mangalore, India.

### ***Contract Consultant – 09/2002 – 05/2006 (part time)***

- Provide technical expertise as part of ongoing relationship with V.D.S as they develop digital asset management tools. Work includes requirements definition, customer visits and detailed technical research. Designed MPEG7 (XML) schema for Frameline 47 product. See [www.frameline.tv](http://www.frameline.tv) for product details.

## **BT Global Services**

Central London

### ***Contract Consultant – (09/2002 –05/2006)***

- Voice reporting data warehouse based on SQL\*Server 2000 with Excel connected workbook front end.
- Analysis of new features required in billing and finance systems for international carrier services business. Implementation of Business Objects universe (v6), reports against Oracle9i database.
- Managed successful decommission of legacy data warehouse to replacement system. Wide ranging role requiring technical skills - Business Objects universe and report creation, Oracle8i, training skills (developed and delivered Business Objects training to 65 people over 4 sessions), analysis skills (gap analysis between legacy and new system features), communication skills (developed web site to communicate project aims, progress etc and presentations to users).
- Technical lead for Global Services Wholesale business migration from legacy system to Siebel for prospect and customer management. Short project with aggressive timescales to transfer data from legacy system into Siebel with minimal interruption to business. Developed integrated reporting tool in MS Access 2000 to merge old and new system data together during transition period.
- Developed Siebel account visibility web site based on MS Access and ASP to allow users to easily check which accounts they had been set up to see, and to allow account owners to manage account teams. The tool is used on an ongoing basis by users and system admin people to manage account visibility.
- Technical lead on introduction of sub-system to correct traffic recordings that replaced manual process with spreadsheets.
- Analysis of business requirements to introduce time-of-day recording, accounting and finance into GS Wholesale processes and systems.
- Dashboard owner for Global Telecom Markets responsible for delivering Siebel Analytics reports.
- Technical specialist on high-benefit projects with fast turnaround times.

## **Concert Communications**

Central London

### ***Contract Consultant (10/2001 – 08/2002)***

- Working as business analyst and technical expert in billings and finance areas of international carrier business. Various responsibilities including requirements capture and documentation, data analysis (Access and Excel), report writing (SQL and Business Objects) against Oracle Financials (AP/AR) and bespoke billing system (Oracle) and technical support to financial analysts.

## **BT Fastrack**

Croydon, Surrey

### ***Contract Consultant (05/2001 – 10/2001)***

- Supported business process reengineering project to improve accounts payable/receivable process. Worked closely with the business to define requirements. Designed and built several complex Business Objects reports against Oracle database using SQL and PL/SQL.
- Designed and built several reports against international billing system database to support corporate reporting and fraud detection in traffic declarations. Business Objects, Oracle (SQL and PL/SQL).
- Developed and delivered technical 1 day internal course "Introduction to Business Objects".
- Tuning work to improve performance of existing reports.

## **Miramedia**

Tunbridge Wells, Kent

### ***Sub-Contractor (07/2000 – 04/2001) – work offsite on fixed price project basis***

- Developed internet application to enable online submission and authorization of contractor timesheets. Timesheet content and presentation is highly configurable (through use of XML and XSLT stylesheets) to agency requirements. The application is currently in beta test with 2 agencies. Developed using Perl, SQL, JavaScript, XML, XSLT on Mysql and Linux.
- Designed and developed intranet jobs board for Merrill Lynch. Admin components for data entry, image uploads and user components for content display. Developed using ASPs (Jscript), SQL Server 7 (SQL and stored procedures), ADO, IIS on NT server platform.
- Built various Perl/Linux/Mysql web registration systems for the exhibition industry.

## **EDS (Xerox account)**

Hounslow, Middlesex

### ***Contract Consultant (07/2000 – 09/2000) – part time***

- Support of data extracts (ProC/Oracle) developed in first phase of project.

### ***Contract Consultant (03/2000 – 07/2000) – full time***

- Design and build of data extract modules from Xerox UK legacy marketing database to Xerox European standard marketing database solution. Extract programs written in ProC V2. Analysis of key area of Xerox organization units and employees and mapping to equivalent hierarchy on new system.
- Design of weekly data feed between legacy and new system to support transfer of Xerox equipment information.

## **GE Lighting Europe**

Kingston-Upon-Thames, Surrey

### ***Contract Oracle Data Warehouse Consultant (08/1997 – 03/2000)***

- Complete end-to-end data warehouse performance audit and tuning project to ensure current and future performance would satisfy anticipated growth in user base and data warehouse size. Y2K audit and test plan.
- Business Objects 5/Web-I 2.5 upgrade. Evaluation of upgrade from V4/Web-I 2.0 to V5/Web-I 2.5 to discover potential issues before upgrade of production system. Configuration of repository, broadcast agent and Web-I on Windows NT4.
- Redesign of Business Objects security domain to improve control and maintainability of user access and module usage.
- Designed and built a data driven application for loading nightly data into the data warehouse. Developed in Perl on Windows NT4, Oracle7, ODBC, sql\*loader and PL/SQL.
- Design and build of “SMART” customer services data warehouse. Captured requirements from SAP and Business analysts and then designed and built an Oracle data warehouse for cross-functional reporting and analysis. The data warehouse has been in production for 20 months and has been expanded significantly. All data requirements were captured using Designer 2000 v2 which was used to generate the physical database.
- Designed and built standardized Perl modules for use in Windows NT environment. The modules are generic to allow reuse in different systems implemented on Windows NT and provide facilities such as SMTP email, Oracle utilities, message logging etc. Built data load for lost sales data in Perl using the modules. This was the first GE Lighting production data load on Windows NT.
- Designed and built web based recruitment tracking system. Responsible for requirements capture (using Designer 2000), design and build using Oracle7 database, Oracle web server v3, PL/SQL, JavaScript and Frontpage 98. A second system for project tracking was completed along very similar lines.
- Built proof of concept order entry system with Oracle database server and web based user interface and back end order posting to SAP R/2. This was built according to fairly loose specifications to prove to senior management the feasibility of a web based order entry system. The prototype was written in PL/SQL using Oracle Web server v2.1 and Pro\*C against an Oracle database.

## **EDS (based at Xerox)**

Uxbridge, Middlesex.

### ***Contract Analyst/Programmer (02/1995 – 08/1997)***

- Successful 8 month project to build interfaces between Xerox marketing database (MDB) and Xerox territory configuration tool and to roll out to 6 regional offices. Responsible for analysis of business requirements and their mapping onto functionality provided by the tool, and subsequent design and implementation using ProC V2, PL/SQL V2 and database triggers. Supported year-end activity to upload data into MDB, and produced Excel spreadsheet data analysis reports.
- A 3 month project to analyze, design and implement a data feed from a remote marketing database to MDB so that data amended by remote sales people using laptop PCs could be reconciled with the MDB. Implemented in ProC V2, PL/SQL V2 and database triggers.
- Responsible for analysis, design and server implementation of a data load from an external company into the MDB using sql\*loader, PL/SQL V2 and ProC V2.
- Completed modules for an application called Early Warning System (EWS) which collected data from other systems and databases, analysed the data and reported the customers who could potentially be lost to competitors. Work involved communicating with end users, designing and implementing new data extracts and analysis routines in ProC V1.6 and PL/SQL V2 and supporting the system in production.

- General: SQL performance tuning work, using tkprof, to improve performance of MDB and related applications. Designed and implemented standards for PL/SQL error handling and trapping. Technical guidance and assistance to other team members and technical interviewer during recruitment activity.

**Oracle UK (Permanent Staff)**

**Human Resources (HR) Product Development Group**

Bracknell, Berkshire.

***Principal Software Engineer (06/1992 - 02/1995)***

- Responsible for developing FastFormula V2, a tool used to express payroll calculations in a simple end-user language. FastFormula is a compiler that parses a 'formula' and generates pl/sql code. It is written in 'C' and Pro\*C and has a SQL\*Forms v4.5 interface.
- Leader of 4 man team responsible for developing core technologies for use in Oracle HR products.
- Developed custom database schema generator to satisfy highly specific requirements of HR products. Written in Pro\*C, it reads CASE\*Dictionary tables and generates SQL to create tables, primary keys, foreign keys and check constraints.
- Actively involved in recruitment including interviewing and graduate assessment days.
- Technical guru providing guidance and assistance to other department members on design, Oracle tools, Unix, coding techniques, debugging and new technologies.

***Senior Software Engineer (07/1990 - 06/1992)***

- Defined departmental standards for coding 'C' and PL/SQL and the use of Oracle7 features.
- Conducted user review of FastFormula product and completed major enhancements including database re-design and language improvements.
- Developed standalone SQL\*Forms v3.0 based version of FastFormula and promoted it's use outside the group via presentation seminars.
- Resolved problems with code release mechanism and bug fix procedures following a period of instability in code shipped to beta customers.

***Software Engineer 2 (07/1989 - 07/1990)***

- Responsible for porting Oracle Personnel v3 to a variety of Unix platforms, including a 6 week secondment to the porting group in California.
- Member of 3 man team developing FastFormula V1. Responsible for design and build in 'C' and Pro\*C of pl/sql code generator modules.
- Designed DateTrack, a mechanism to enable SQL\*Forms to maintain time related data. DateTrack is used throughout the HR products to provide an historical view of data.

**Protek Ltd (Permanent Staff)**

London.

***Software Engineer (08/1987 – 07/1989)***

- Designed and implemented in 'C' a PC based system to control and capture data from an instrumentation unit.
- Ported graphics library of Protek's technical database product (TekBase) from HP Pascal workstation to Unix and rewrote (Pascal) to use Starbase graphics library.
- Implemented a Fast Fourier Transform and associated functions in 'C' used in a signal processing library integrated with TekBase.
- Completed a consultancy study for Courtaulds into the computer requirements for monitoring viscose production lines at their Grimsby factory.

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## **Education**

### **University of Surrey      09/1982 – 03/1986**

Guildford, Surrey.

Master of Engineering (MEng) in Electronic & Electrical Engineering  
- Pass with Distinction

### **Hounslow Manor School      09/1975 – 07/1982**

Hounslow, Middlesex.

'A' levels - Maths(A), Physics(A), Electronics(A), Chemistry(B)  
'O' levels - Maths(A), Physics(A), Chemistry(A), English Lit.(A)  
English(B), German(B), Electronics(B), Geography(B)  
GCSE- Italian (A) (1996 at evening classes)

Head Boy: 1981 – 1982, House Captain: 1980 - 1981

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## **References**

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