

# Denis Howe

**Experienced full-stack developer**

**JavaScript, Linux, Database, PHP, Perl**

**E-mail:** [denis.howe@gmail.com](mailto:denis.howe@gmail.com)

**Mobile:** 07950 686 615

**Address:** 19 Wren Avenue, London NW2 6UG

UK citizen. Available immediately. References available on request.

## **Web Development** 1995-

JavaScript, React, Redux, Angular, Node, jQuery, Apache, REST services, content management, JSON, CSS, PHP, XML, XSLT, ASP, IIS.

## **Database** 1998-

MySQL, Oracle, MS SQL Server, Sybase, data modelling, object relational mapping, query optimisation, reporting, data transformation.

## **Linux** 1980-

Shell script, system admin, internals, Solaris, Red Hat, Ubuntu, Debian, Solaris, Nextstep, Openstep, Version 7, BSD, System V, X Window System.

## **Machine Learning** 2018 -

MIT online course: supervised and unsupervised learning, linear regression, logistic regression, gradient descent.

## **Perl** 1991-

CGI, MySQL, OO, Unix, Windows, networking, GUI, GD.

## **Testing** 2003-

Unit testing, system testing, planning, specification, automation.

## **Adobe Experience Manager** 2010-

Java development, Perl automation, Sling, client libs, troubleshooting.

## **Other Skills & Experience**

- Source code control: Git, Subversion, Perforce.

- Agile, team leader, requirements capture, project management, presentations, Microsoft Office (VBA).
- Java (4 years) WebObjects, Tomcat, Web Services, SonicMQ JMS, log4j
- Networking (1985-) HTTPS, SMTP, TCP/IP, DNS, routing, Unix, Windows.
- C (8 years), VB (3 years), VBA, VBScript, Ant, Tcl, assembler, Emacs Lisp, configuration management.
- Assembly code (15 years) 68000, SPARC, 6502, 8086, transputer, ARM.
- PHP, Fortran, Lisp, Prolog, Miranda, Haskell, Parallel C, Occam, Tcl.
- Windows (1998-) 95, 98, NT, 2000, MS DOS, sys admin, Registry
- ICL George 4, Multijob, VMS, RISC OS, Acorn Basic (20 years)
- Documentum (6 years) DQL, API, Media Services, Web Publisher, DA, RightSite

## Work Experience

### May 2006 – Apr 2018 GVC (ex Cashcade, Party Gaming, bwin.party)

#### Web Developer

- Web Development - JavaScript, [canvas](#), Angular, React, jQuery, Node, CSS, LESS, Java, PHP
- Automated website testing and monitoring (Perl, Node, PHP)
- Specified and maintained flexible object store for miscellaneous web site configuration data
- Web Content Management - technical and operational support, SEO, Google Analytics, Google Tag Manager, tracking
- Adobe AEM (ex CQ5), IIS, Documentum, Google Apps
- Responsive design targeting desktop (Chrome, IE) and mobile (iOS, Android)
- Task management - Agile, scrum, V1, Asana, SNOW.

#### Linux DevOps Engineer

- Configured and managed load-balanced farms of VMs.
- Apache configuration and troubleshooting, virtual hosts, mod\_rewrite, rewrite maps, shared configuration, GeoIP.
- Configured content distribution networks - Akamai, Cloudflare
- Automated web site deployment via OpenVPN
- Registered and managed 300+ domain names, whois, DNS configuration, SSL certificates.
- Administered and supported network of 40 Windows PC users
- Set up and maintain e-mail services, sendmail configuration, MX, SPF records.
- Liaised with software and service suppliers

## Senior Perl Developer

- Maintained and developed “Instant Win” games server Perl code with Oracle database
- Developed new, high performance, asynchronous, socket level server code
- Developed OO framework, unit tests
- Created plumbing code between third-party APIs, data feeds, databases, FTP file uploads, e-mail, reporting systems, web interfaces, data scraping from websites, MongoDB.
- Maintained and developed many web based and command-line Perl utilities and reports
- Integrated and tested new games, configured winning odds

## July 2003 – April 2006 BBC

### Software Engineer, News Interactive

Developer in team of ~30 supporting the BBC News and Sport web sites.

- Oracle, MS SQL
- Perl: OO framework, CGI, XML, Win32, GUI, GuiTest, GD
- Documentum 5.2: DFC, API, DQL, Java Methods, Server install and customisation, WDK, docapp, Media Services.
- Java: SonicMQ JMS, WebObjects, Tomcat, Web Services, log4j
- Ant, Nant, make, Eclipse build tools
- Apache, IIS, VB6, ASP, C#, .NET (practical + course)
- VSS, Perforce source code repositories
- Test tools: Empirix e-TEST, WinRunner

## May 1995 – March 2003 Linklaters

Top UK corporate law firm with international presence.

Experience: Documentum 3, 4i, DQL, API, WebQL, DocBasic, RightSite, WebObjects, Java, UML, SQL, Sybase, MS SQL Server, data modelling, VB5, ASP, Active-X, MSXML, MTS, XSLT, JavaScript, Perl, Verity, NEXTSTEP, Tcl, shell.

### Knowledge Management Systems - Analyst Architect Developer

- Lead analyst/architect/developer in team of two senior developers
- Successful international roll-out of 3 generations of knowhow system.
- From limited access, inflexible data model, “green screen” interface to highly configurable, open data model, web interface, available on every desktop.

- Maintained all the code for first system: Documentum, DQL, WebQL, and DocBasic (Documentum languages for dynamically generating HTML based on the contents of the DMS) and an Active-X control in VB5.
- Contributed to data modelling; fixed and enhanced code for second system: WebObjects (Apple's object-relational mapping), Java, Sybase, SQL, JavaScript.
- "Knowledge Index" – dynamic object model in relational database.
- User requirements capture (UML use cases), high-level design, feasibility studies.
- Sole responsibility for successful migration of knowhow in a variety of complex formats: Perl, SQL, DQL, MS DOS.
- Designed and implemented sophisticated algorithm for dynamic generation of SQL to implement user queries created using a query builder interface, itself driven by the dynamic object model.
- Studied behaviour of MS SQL Server 2000 query optimiser.
- Coding: VB (MSXML, MTS), ASP, JavaScript, XSLT, and SQL.
- Evaluated enterprise full-text search software for a number of applications including the company intranet, resulting in the successful global deployment of Verity K2E.

#### **Development Team Leader**

- Lead team of seven full-time developers producing intranet and Internet web content and ASP applications and developing knowhow applications.
- Guided or contributed directly to successful international roll-out of three generations of intranet: static, Documentum RightSite, Documentum WebPublisher.

#### **E-mail System Technical Consultant/Developer**

- Collaborated with external developers in diagnosing and fixing bespoke NEXTSTEP e-mail system, enabling successful international roll-out.
- Wrote Tcl and shell programs to perform administrative tasks.

#### **Web Analyst Developer**

- Lead technical consultant and developer for Blue Flag (innovative service selling legal advice over the Internet).
- Requirements analysis and product selection.
- Oversaw evolution of system, worked with FrameMaker, Documentum document management system, C, Perl, shell scripts, HTML.
- Liaised with lawyers, external web designers, and hosting companies. Maintained and enhanced the system.

#### **1991 - 1995 Imperial College**

- Created and still actively maintain the world-famous [Free On-line Dictionary of Computing](http://foldoc.org/) (FOLDOC).

- Studied for PhD - implementation of functional programming languages.
- Extended two of the largest ever functional programs to do semantic analysis for program optimisation.
- Maintained Sun workstation running Solaris, including installation of new system software, writing utility programs. Studied SPARC cache performance.
- Participated in public domain software projects, submitting modules, bug reports, and fixes for packages such as GNU Emacs.

## 1980 - 1991 GEC Hirst Research Centre, Wembley

- Sponsored student, Hardware & IC design, Embedded Systems, System Programmer, System Manager, Unix Guru, Networking
- Team and Project Leader (four graduate researchers + students).
- Contributed to all aspects of the design and construction of hardware and software of "PADMAVATI" parallel AI computer.
- Programmed in C, FORTRAN, 8086 assembler, 68000 assembler
- Wrote Unix device drivers. Understood Unix kernel, real-time systems.
- Maintained and debugged an Emacs-like screen editor. Installed departmental MMDF mail system.
- Installed and managed network of Unix computers and PCs. Fixed Unix kernel networking code using only machine code debugger, adb.
- Designed and built a Content Addressable Memory chip. Managed various groups involved in its fabrication and testing.

## Education

- 2018 Machine Learning, MIT (in progress)
- 2006 SANS "Writing secure web applications" (3-day course)
- 1979-82 – BSc Physics (I), Imperial College, London
- 1977-78 – A-levels: Comp. Science (A), Maths (A2), Physics (A), Chemistry (B)
- 1975-76 – O-levels (11 subjects)

## Languages

Farsi (conversational), French (enough to get around), Mandarin (3 years evening classes, HSK 1).

## Activities and Interests

Maintaining [FOLDOC](#), [Algorithmic Art](#), [Ingress](#), [Foil Fencing](#), reading (SF&F, science), mountain walking. Brown belt in Shotokan Karate.