

# JOHN TAYLOR

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Nationality: British

## PERSONAL PROFILE

Data expert with over 30 years experience. Well-developed capacity for combining technical innovation with working at the most intricate levels of detailed deployment. Able to make highly complex and demanding business data analysis and database projects work in practice using a wide range of technologies and languages. An experienced database and operating system administrator, able to deal with competing demands of a wide range of users and environments.

## KEY SKILLS

- **Highly experienced in programming** in Java, C/C++, VBA, Perl, Python, PHP, PL/SQL, SQL, Excel and other languages; extensive experience with Unix shell scripting, TCL, Awk
- **Experienced data analyst** for ETL, migration, data characterisation, profiling, natural language processing, machine learning
- **Extensive DBA, programming and troubleshooting experience:** Oracle, PostgreSQL, DB2, Sybase, SQL Server, PL/SQL, PL/pgSQL, Access/VBA, JDBC
- **Extensive experience using developer tools:** PL/SQL Developer, Oracle Enterprise Manager, Eclipse, NetBeans, Glassfish
- **Highly experienced in mentoring** advising product developers, less experienced team members, etc.
- **Performance Testing & Tuning:** Pro-active in finding and testing new ways to improve the performance of existing applications and technologies. A practical and business-minded innovator.
- **Unix system administrator**

## RECENT EMPLOYMENT

### 2015-2016: Private contract work (under NDA)

Python, R, Shiny, PHP, HTML, CSS, PostgreSQL, MySQL, Unix/Linux/macOS scripting, PyCharm, Eclipse, Git

- Risk analysis mathematical model proof-of-concept (R, shiny)
- Transaction analysis pilot (Python, PostgreSQL)
- Word list management tool (Python, Unix scripts, PHP, HTML, CSS, MySQL)

### 2013-2014: Contractor

Moshogo Limited 24 York Mews London NW5 2TJ

Java, Python, NLP (Java/Stanford, Python/nltk), PHP, Unix scripting, PostgreSQL, data analysis, text analysis, prototyping

### 2012-2013: Contractor

Omniscision Limited 38 Oxford Road Farnborough Hants GU14 6QU

Java, VBA, Access, SQL Server, Excel, data analysis

### 2009-2012: Contractor

Lloyds Banking Group

Oracle, PL/SQL, Unix scripting, data analysis

### 1997-2008: Senior Data Analyst and Software Engineer

Fortent (formerly Searchspace, now part of Actimize) 18 Mansell Street London E1 8AA

## ROLES

- **Data management and analysis:** Wrote many applications and utilities using Java, C (also Unix shells and Perl, Awk, Tcl) for file management e.g. data transformation, parsing and profiling.

- **Software development:** extensive experience using developer tools:
  - **Eclipse.** Java development and debugging; file analysis, database management with jdbc, performance measurement, integration with CVS and Subversion
  - **PL/SQL Developer.** Used for pilot analysis projects e.g. investigation of sample customer data, checking data integrity, characterisation and developing algorithms for pattern detection. Also used for PL/SQL package development
- **Database administration Oracle and DB2.** Wrote many Oracle utility packages e.g. scheduled table and schema statistics, table histogram analysis, monitor for displaying formatted SQL for active sessions.
- **Software architecture development** and prototyping for many pilot projects, including database design and implementation.
- **Advisor to product developers and mentor** to other colleagues e.g. product developers, testers, customer support staff, research colleagues and intern Ph.D. students on a daily basis
- **Data manipulation operations:** characterisation, conversion and cleansing (often necessitating liaison with data providers).
- **Tool development** for data analysis, transformation, clustering, histogramming etc.
- **Benchmarking, liaison with software vendors** (e.g. IBM Hursley, CICS realtime, GRID investigations).
- **Infrastructure development** for project support - scripting, code management, revision control CVS and Subversion using intranet.
- **Research department systems administration** Linux, AIX.

## KEY ACHIEVEMENTS

- **2015** UTF-8 file and web page character and byte analysis utility in Python : <https://github.com/taylorcjohn/utf8>
- **2009** Ported OpenESB Intelligent Event Processor (JBI 1.0 compliant Service Engine) to DB2
- **2008** Developed HTTP message generator for OpenESB performance testing
- **2007** Wrote automatic tuning harness for Fortent Monitor AML system
- **2006** Conducted realtime performance tests for experimental data feed harness. Wrote Ajax web interface
- **2005** Designed Java data generation utility for synthesis of very large volumes of realistic test data (e.g. tens of millions of accounts) used for functional and performance testing and demonstrations. Histogram-based value and volume generators for mix of normal and unusual behaviour for transaction streams.
- **2004** Conducted Searchspace framework GRID enablement project with IBM at Hursley Park
- **2003** Devised SQL column product mechanism, implemented Oracle user-defined aggregate function.
- **2001** Designed and wrote graphical cluster analysis tool (in Java) using various clustering algorithms to be applied to multi-dimensional data sets. Implements optimal fitting, filtering and re-scaling to data sets.
- **2000** Designed and implemented instrumentation system (in Java) for collecting and consolidating many separate data streams from sampling agents on heterogeneous hardware.
- **1999** Developed PL/SQL job sequencing and dependency mechanism in Oracle together with TCL-based interaction via a daemon for operating system scripting, file management and backup control. Used at RBS, Bank of New York, New York Stock Exchange.
- **1998** Devised and implemented Java-based scheduler mechanism for job control in complex Sybase application (London Stock Exchange). This scheduler was extended to form the central control mechanism for all Searchspace systems used in banks throughout the UK, USA and Europe.
- **1998** Designed and wrote code preparation and management tool in Perl for automatic modification and distribution across multiple Sybase databases (London Stock Exchange). Includes Perl implementation of C macro pre-processor (cpp) functionality.

## PREVIOUS EMPLOYMENT: DETAILS IN BRIEF

### 1995-1997: University College London Department of Anatomy and Developmental Biology

**Senior Research Fellow** Esprit robotics projects CONNY (6715) and PCI-CAPRI PREFER (EP9602)  
 Departmental network manager. Systems management Solaris, AIX, Windows. Maintenance of departmental web pages, email and mailing lists.

### 1988-1995: University College London Department of Computer Science

**Senior Research Fellow** Esprit neurocomputing projects Pygmalion (2059) & Galatea (5293, 7807)  
 Roles included specification and implementation of matrix-based virtual machine language (VML) for neural network and robotics development environments.

**1986-1988: Programmer** MicroPro International (UK), London.

**1982-1986: Director** Poppytime Ltd., London. Software consultancy

**1980-1982: Programmer** Canon UK.

**1979-1980: Programmer** Software Sciences

**1977-1979: Programmer**, Advanced Management Systems Ltd.

## QUALIFICATIONS

- MSc Systems Engineering, City University
- MA Physics, University of Cambridge

## **ELENCO DOCUMENTI E TITOLI PRESENTATI**

1. Domanda di partecipazione alla selezione;
2. Certificazione di laurea "Bachelor of Arts";
3. Certificazione di master "Master of Arts";
4. Certificazione di master "Master of Science in Systems Engineering";
5. Curriculum vitae;
6. Lettera di referenza di Michael Recce;
7. Lettera di referenza di Jason Kingdon;
8. Pubblicazione scientifica dal titolo: "Flexible Operating Environment for Matrix Based Neurocomputers"
9. Pubblicazione scientifica dal titolo: "Vision and Neural Control for an Orange Harvesting Robot"
10. Pubblicazione scientifica dal titolo: "Video Grading of Oranges in Real-Time"