

**Thomas J H Blench**  
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## Personal Statement

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Software developer with over 15 years of commercial experience and breadth of skills who has worked in technology, media, telecoms, and energy industries. Good domain-specific knowledge from these industries in addition to technical skills.

Good communication skills: experienced at interacting with a range of technical and non-technical people of different levels of seniority including suppliers and customers.

Committed to good technical practices including continuous integration and test-driven development.

Experience of working in a range of organisations from start-ups to blue chip corporates.

## Technical Skills

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### *Programming Languages*

Java, C and C++, C#, Objective-C, Swift, Python, ECMAScript/JavaScript.

### *Databases and ORMs*

NoSQL: CouchDB; SQL: SQLite, PostgreSQL, MySQL, Informix, Firebird, NHibernate.

### *Development Infrastructure*

Git, GitHub, Jenkins/Groovy, Travis, Gradle, Maven.

### *Operating Systems / IDEs*

Development on Linux, UNIX, macOS, Windows; using Emacs, GCC, Clang, Xcode, Visual Studio, IntelliJ IDEA, Android Studio, Eclipse, Qt Creator.

## Employment History

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### *January 2014 to Present — Software Developer (Band 8), IBM*

Initially a contract role for Cloudant, becoming a permanent role with IBM after their acquisition of Cloudant.

The key focus of this role is the development of *client libraries* and *sync libraries*. These open-source libraries are intended to lower the barrier to entry for potential users by providing a fluent and idiomatic API to Cloudant for a given programming language.

Specifically, *client libraries* provide CRUD access by executing HTTP REST requests. Layered on top of this are extra facilities transparently providing such as authentication, (de)serialisation, connection pooling, logging, and retrying failed requests. Supported languages include Java, Swift, Python, and Node.js.

By way of contrast, *sync libraries* make use of the CouchDB replication protocol to provide masterless two-way synchronisation between a local SQLite database and a remote Cloudant instance. Currently available on iOS/macOS and Android/JavaSE these libraries are ideal in mobile environments or where network connectivity is limited.

Writing open source-software brought a new set of challenges for me: conducting code reviews in the open, prioritising internal and external feature requests, and publishing releases.

All libraries have a comprehensive CI pipeline in Jenkins to ensure the quality of builds and releases. To provide external visibility of build status, many libraries also have other CI configured such as Travis. This also allows us to accept pull requests without having to make our full build and release process public.

Additional issues unique to developing libraries include API design, clear documentation, adherence to semantic versioning, and deprecation and removal of features.

*October 2012 to December 2013 — Software Developer, Aria Networks*

*Contract Role:* C++ and ECMAScript (JavaScript) development on cross-platform network management and simulation tool, using Qt Creator.

Initially brought in to the company on a four month contract to help deliver a project for a large telco customer, this contract was subsequently extended several times giving me the opportunity to do core product development as well as deliver projects for additional customers.

Developed a plug-in to convert and provision data from a tier-1 partner system via SOAP/HTTP and drove through successful certification on their accredited developer partnership program.

*February 2010 to October 2012 — Software Engineer and Shareholder, VidCheck*

C#, C++, Objective-C and JavaScript development of VidChecker compressed media analysis product and plug-ins at this start-up company.

Responsible for development from scratch of C# / WCF server using NHibernate with a Firebird database for persistence and web UI which makes extensive use of jQuery.

Configured and maintained large parts of infrastructure including Subversion source control, NAnt build scripts, and Jenkins continuous integration server.

Wrote DSP algorithms and OS X CoreAudio plugin for measurement of loudness and true peak of audio to conform with EBU and ITU specifications.

*February 2009 to February 2010 — Software Engineer, Garrad Hassan*

C# and C++ development of WindFarmer energy analysis product.

*August 2008 to January 2009 — Consultant, Torry Harris Business Solutions*

*Contract role:* Java design for integration of large billing project.

*January 2007 to July 2008 — Software Engineer, Tektronix Bristol*

Java and C++ development on compressed media analysis products.

Java development on JBoss-based server using EJBs and MySQL for persistence of analysis results.

Developed SOAP API for JBoss-based server.

Integrated C Microsoft WMA audio codec with in-house C++ ASF demuxer / media framework and performed certification of resulting product.

*October 2001 to December 2006 — Senior Designer, Orange*

Java development integrating between front-end applications and legacy back-end billing and customer management systems.

C development of in-house billing and mediation platforms.

## **Education**

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*1998-2001 University of Bristol*

Graduated with a 2.1 in Computer Science BSc.

*1996-1998 Hills Road Sixth Form College, Cambridge*

GCE A Levels: English Language A, Mathematics A, Physics A, General Studies B.

*1991-1996 City of Ely Community College, Ely, Cambridgeshire*

10 GCSEs, grades A-C.

## **References**

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References and additional details available on request.