

Nicholas H.Tollervey **BMus(hons) MA MSc FRSA**

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Summary

I am a software engineer, classically trained musician, philosophy graduate, teacher and writer.

My commercial development experience has been gained in a diverse range of industries: investment banking (Barclays Capital), two start-ups (Fluidinfo and Xmonic), media (The Guardian) and large public sector based projects (Council of Europe and Royal College of Paediatricians and Child Health).

I can offer expertise in:

- Open-source technologies:
 - Python (including Django, Flask and Twisted)
 - PostgreSQL
 - Various NoSQL databases (FluidDB, MongoDB, CouchDB etc.)
 - Git / Mercurial / Bazaar / Subversion
 - Linux
- Web based technologies:
 - Javascript (including jQuery, Qunit, Jasmine, Sinon & EmberJS)
 - (X)HTML(5)
 - CSS
 - REST based API
 - Web-services
 - Semantic web: Microformats / RDFa
- Microsoft based technologies:
 - C#
 - ASP.NET
 - Winforms
 - SQL Server
 - NUnit
- Development methodologies:
 - Agile development
 - Object Oriented Design
 - Pair programming
 - Test driven development.

I am active in the free-software community, regularly speak at programming conferences (most recently Europython and PyconUK) and have authored a technical book for O'Reilly and Associates ("Getting Started with Fluidinfo").

I am a member of the Python Software Foundation and a Fellow of the RSA.

Examples of my FOSS code can be found on GitHub: <http://github.com/ntoll>

Employment History

- **Freelance Developer, Guardian Media Group, London**

**Sept 2012
– Present**

I am part of a small agile team that maintains the Guardian's online dating site, Soulmates (the most profitable part of the Guardian).

In addition to maintaining the Django based front-end I've worked with a MongoDB database on client side HTML, CSS and Javascript including first steps for making the site responsive. I've had some exposure to the Scala based API layer as well as involvement in various dev-ops related tasks and accomplishments.

I've also been involved in sprint planning, cross team retrospectives and various other aspects of agile methodology. Furthermore, I've been pro-active in pair programming with colleagues and have given presentations on TDD to the wider digital development team.

I've even had the chance to write articles for the Guardian's Developer blog.

Technologies used:

- Python (Django)
- Javascript (jQuery)
- Scala
- Web: REST, HTML5 & CSS
- MongoDB
- SOLR

- **Guy #3, Fluidinfo, London / Barcelona / New York**

**April 2010
– Aug 2012**

I was the third person to join Fluidinfo – a start-up backed by Betaworks, Esther Dyson and Tim O'Reilly.

Fluidinfo is an openly writeable, shared data store based on tags and values exposed via a RESTful API. It allows anyone to store, organise, query and share data about anything. For this reason, some people call it a social data platform while others have described it as, “a database with the heart of a wiki”.

I was involved in most aspects of the business:- front and back-end development, creation of client libraries for Python, Javascript, .NET and Android, presenting to developers, liaising with and supporting users, writing documentation, writing a book, answering queries from the press and acting as a technical contact for potential clients.

Technologies used:

- Python (Django & Twisted)
- Javascript (jQuery, QUnit, Jasmine, Sinon and EmberJS)
- Web: REST, JSONP, HTML5 & CSS
- PostgreSQL
- Puppet

- **Software Consultant, Fry-IT Ltd, London, UK**

**Jan 2009 –
April 2010**

Royal College of Paediatricians and Child Health – ASSET

I was lead developer on a Django based web-application for internal use within the RCPCH for gathering assessments and reporting on the progress of trainee paediatricians in the UK. I was involved in all aspects of the project including client-facing requirements capture, writing technical reports, architecture design, coding,

testing, deployment and client support. The client reported that this was the first IT project they have been involved in where the product was delivered on time, under-budget and better than specified.

Technologies used:

- Python (Django)
- PostgreSQL / SQLite
- Web: HTML / CSS / Javascript / jQuery / Ajax
- PDF reporting (ReportLab)

• **Software Engineer, Barclays Capital Ltd (Contractor), London, UK**

**March 2007 –
Sept 2008**

I worked as a software engineer within the Development Tools team with responsibility for designing and delivering bespoke software solutions (both web and desktop based):

- ASP.NET / C# / SQL Server 2005 based website for administering a self-service knowledge base to support help-desk colleagues.
- Sharepoint web-parts that expose a product support knowledge base and automate the generation of support tickets within a Jira based issue tracker via SOAP based API.
- C# based library / framework for working with Perforce SCM product.
- Winforms / .NET based desktop client tools to enhance the Perforce SCM client GUI (implementation of shelving / un-shelving, “smart” integration / merging, various performance improvements).

Other responsibilities included helping to administer and support the various services and applications that the team provides to “clients” within the bank:

- Sharepoint based knowledge base
- Jira issue tracking system
- Confluence Enterprise Wiki
- Perforce SCM
- MediaWiki based team wiki

Technologies used:

- C# / ASP.NET / ADO.NET (2.0-3.5)
- SQL Server 2000 / 2005
- Sharepoint Server / Designer 2007
- Perforce (source control)
- Winforms / Click-once / InstallShield
- XHTML / Javascript / CSS
- Web Services / SOAP
- NUnit
- Visual Studio 2003 / 2005

• **Software Consultant, Bis-Web (Contractor) Oxfordshire, UK**

**Nov 2005 –
Oct 2006**

Working as a consultant I was lead developer/architect on two contracts for Bis-Web Ltd:

- **Council of Europe** - Both the public and internal facing aspects of a bespoke web-based recruitment application for the Council of Europe. I was involved in all aspects of the project including client-facing requirements capture, writing technical reports, architecture design, coding, testing, writing documentation and deployment. I also developed an Object-Relational database abstraction layer and various generic “helper” classes for internationalisation and the production of PDF documents for this project.
- **Rockpools** - A web-based financials package for Rockpools to be integrated into their own legacy bespoke CMS (written in a mixture of C# and VB.NET). I was

involved in all aspects of the project including client-facing requirements capture, architecture design, coding, testing, documentation and deployment.

Both projects used the following technologies:

- C# (ASP.NET / ADO.NET)
- SQL Server
- Javascript
- HTML / CSS

In addition, I provided consultation to Bis-Web on the agile development methodology, coding standards and best practices, improvements in source control (using Subversion), testing with NUnit, Lucene search technology and the hiring / testing of potential new software developers (I wrote their practical tests and took part in and advised upon several job interviews). I also mentored some of their new and junior developers.

• **Software Developer (Artificial Intelligence), Xmonic Ltd, Oxfordshire, UK**

**Dec 2003 –
Oct 2005**

I was part of a small (start-up) team that developed a web based business tool (RM3) for strategic account managers in large multi-national businesses. In addition to web-application development I was responsible for an expert system and natural language conversational agent.

Technologies used:

- C# (ASP.NET / ADO.NET)
- SQL Server
- Winforms
- Javascript / HTML / CSS
- NUnit

• **Freelance Writer, Computer Shopper Magazine, Shropshire, UK**

**Aug 2002 –
May 2003**

I wrote several articles and reviews on music hardware and software, Linux and IT in education whilst studying for my MSc in Computing.

• **Head of Music / Freelance Music Teacher, UK State Education, Berkshire, UK**

**Sept 1996 –
Aug 2002**

I was a head of an inner-city Secondary (High School) music department and then a freelance music teacher. I organized / took part in:

- classroom teaching for students aged 11-18
- concerts and drama productions
- various adult education theory and piano courses
- instrumental lessons from kindergarten to university level
- conducting, composing and arranging

• **Freelance Musician, Self Employed, London, UK**

**Sept 1993 –
2002**

Performed on / took part in:

- national and local radio and television
- most of U.K.'s major concert halls and venues
- various C.D.s as a session musician and tours of U.K., Europe and Asia
- Capital Brass Quintet (founding member)
- composing and arranging

Education & Affiliations

- **Royal College of Music. London University.** BMus(hons). 2.1 (1991-1994).
- **Institute of Education. London University.** M.A. Philosophy of Education. (1999-2002).
P.G.C.E. (1996).
- **Birkbeck College. London University.** Member of the Philosophy Department's
Postgraduate School of Advanced Study. (2001).
- **Wolverhampton University.** MSc Computing. (2002-2003).
- **Python Software Foundation** Elected Spring 2012
- **Fellow of the Royal Society for the Arts** Elected Spring 2012
- **Microsoft Corporation** MCP Microsoft Certified Professional "Developing
Web Applications using C# and ASP.NET" (2005).
- **Philosophy of Education Society of GB** Member (since 2001).

References

Upon request.

(An up-to-date copy of this curriculum vitae can always be found at <http://ntoll.org/cv>)