

# Rick Jelliffe

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## Employment

2000-	<b>Topologi, Pty. Ltd.</b> <i>Sydney, NSW</i> C.T.O., Co-founder, Director <b>NOTE:</b> These roles are continuing
2000-2005	<b>Allette Systems, Pty. Ltd.</b> <i>Sydney, NSW</i> XML, Schemas and Software Quality Consultant
1999	<b>Geotempo Inc.</b> <i>Taipei</i> Programmer
1998-1999	<b>Academia Sinica Computing Centre, Academia Sinica</b> <i>Taipei</i> Member of Staff: W3C representative, Chinese XML Now! project, schema research, Schematron invention, seminars
1998	<b>Allette Systems, Pty. Ltd.</b> <i>Sydney, NSW</i> Contracted out to publishing companies: text processing, DTD design
1993-1997	<b>Allette Systems, Pty. Ltd.</b> <i>Sydney NSW</i> Senior SGML Consultant: typesetting, DTD design, programming, text
1990-1993	<b>Electrical Engineering, University of Technology Sydney</b> <i>Sydney NSW</i> Manager, Research Computing Centre
1990	<b>Texas Instruments</b> <i>Sydney NSW</i> Technical Support (UNIX, LISP, PostScript)
1988-1989	<b>Uniscope Inc.</b> <i>Tokyo</i> Technical Editor, Text Programmer
1985-1988	<b>JNA Pty. Ltd.</b> <i>Sydney NSW</i> Realtime Programmer (Microcontrollers), Computer and Network Manager
1984	<b>Datasat, Pty. Ltd.</b> <i>Sydney NSW</i> Tools and Realtime Programmer (Microcontrollers)

## Out-of-Hours Employment and Projects:

2005	DSP and GUI design for VST virtual synthesizers
2000-2005	Author (contracted book and web articles)
1998-1999	Consulting and seminars for PCFromExpert Co, Ltd, Taiwan, and Adobe
1995-1997	Author, <i>XML &amp; SGML Cookbook</i> , font design, typesetting
1993-1997	Musician in various African and reggae bands
1981-1987	Musician in various rock, electronic and folk musical groups

# Career Details by Topic

Further details follow, organized into the following topics: Overview, Project Management, Software Engineering, Internationalization, Standards Development, Publications, Music-Related, Academic, Personal

## Overview

Rick Jelliffe has a track record in

- software development for desktop applications, batch processing and web platforms;
- the technical and content sides of technical and reference publishing for paper and electronic media;
- consulting for military/industrial organizations, legal/technical publishers and government agencies;
- project management;
- public speaking, writing and advocacy;

with acknowledged world-class expertise in standards development, internationalization and schemas.

He has been a pivotal contributor to W3C XML and ISO Schematron, and involved in the development of many other important standards such as XML Schemas and XHTML Modularization. He is a published author. He has worked on scores of books, websites and CDs, written or edited thousands of pages, typeset tens of thousands of pages, generated hundreds of thousands of hypertext links, created a website (Chinese XML Now!) with page hits in the millions, and had his ideas incorporated in standards used by hundreds of millions.

## Management

2000-

### **Topologi, Pty. Ltd.**

CTO, Co-founder and Director

- Designed and brought ten products to market and numerous upgrades
- Managed up to three dedicated staff and four occasional staff

1990-1993

### **Electrical Engineering, University of Technology Sydney**

Manager, Research Computing Centre

- Design, contract and supervise building of centre facilities and faculty LAN
- Determine, tender, evaluate, install, train and support advanced engineering applications for postgraduate students
- Hire and manage two technical staff

## Software Engineering

Experience in

- software quality characteristics analysis (ISO 9126)
- software design and specification (UML)
- desktop application development (Java/Swing, C++)
- Java application porting and packaging for Windows, Linux and Macintosh
- software IDEs (Emacs, Eclipse, CVS, VSS, Ant, Junit, FindBugs)
- web application development (Apache, WebSphere, JavaScript)
- scripts and batch file (shell, .BAT, numerous application-specific scripting languages)
- text processing (XSLT, OmniMark, Perl, awk, sed, Unix utilities) including co-developing in 1989 RISP, a small LISP implementation processing an SGML subset
- typesetting and page description (troff, TeX, FrameMaker, PostScript)
- symbolic programming (Scheme, Common LISP)
- DSP (C++)
- real-time programming for microcontrollers (Assembler)

## **Internationalization**

Career highlights include

- developing typesetting application for PRC laws in English and Chinese
- employment at Academia Sinica Computing Centre with mission to determine and publicize technical requirements for using XML with Chinese scripts to Western developers and standards bodies, and to publicize and develop XML awareness and approaches for Taiwanese (Chinese XML Now! Project)
- proposed the algorithm used for character encoding auto-detection in XML, proposed the naming rules used XML 1.1 (derived from ERCS), contributed to the naming rules used in XML 1.1, championed the adoption of the xml:lang attribute in XML, championed the use of MIME application/\* rather than text/\*
- proposed and drafted corrigenda to ISO SGML to support large character sets and hexadecimal characters (both also adopted by XML and HTML)
- conducted research project for Allette Systems into Asian requirements and SGML, leading to the Extended Reference Concrete Syntax (ERCS) which fed into SGML and XML
- invited expert, 1993-1997, Chinese Japanese Korean Document Processing Experts Group (CJK DOCP), an East Asian group in liaison with ISO JTC 1
- invited expert, 2000-2005, W3C Internationalization Interest Group

Written various chapters and articles on internationalization and XML. Technical draft reviewer for book *Unicode: A Primer* by Tony Graham. Book apparently published in Chinese.

## **Standards Development**

Editor of ISO Standard (2005)

*ISO 19757-3 Document Schema Definition Languages (DSDL) —  
Part 3: Rule-based validation — Schematron*

Contributor to other parts of ISO DSDL, as member of ISO working group  
Championed and drafted ISO 8879 (1996) SGML Annex J (Extended Naming Rules),  
Contributor to ISO 8879 (SGML) Annex L (WebSGML), as Standards Australian delegate

Contributor to XML 1.0 and XML Namespaces as member of W3C XML Special Interest Group  
Contributor to XML Schemas and XHTML Modularization as member of W3C Schema Working Group for Academia Sinica  
Contributor to XML 1.1 and several other standards as invited expert, W3C Internationalization Interest Group or member of public

Contributor to IETF standard *MIME Types for XML*

## **Publications**

### **Books**

*ISO 19757-3 Document Schema Definition Languages (DSDL) —  
Part 3: Rule-based validation — Schematron*, ISO, 2005 (Editor)

*The XML & SGML Cookbook: Recipes for Structured Documents*,  
Charles Goldfarb Series on Structured Information Management,  
Prentice Hall, 1997

Acted as acquisition reviewer or technical draft reviewer for various XML-related books for several publishing houses.

### **Articles**

Articles have appeared in print in the collections *Introducing XML Schemas*, O'Reilly, *XML Hacks*, O'Reilly, *XML Developer's Guide*, Fabio Arciniegas, New Riders, as well as journals and conference proceedings

Dozens of online articles appear in blog at [www.oreillynet.com](http://www.oreillynet.com), and in articles for online magazines XML.COM and O'Reilly Digital Media, and various employer sites

## **Public Speaking**

- Numerous XML, Web and Software Engineering conferences in Australia, Canada, Hong Kong, Singapore, Taiwan, UK, US
- Training courses on XML, XML Schemas, Schematron, XSLT, IETM, FrameMaker, OmniMark, & SGML in Australia, Belgium, New Zealand, Taiwan, US
- Visiting lectures on Internet Protocols for UTS Electrical Engineering students (1993)

Acted as peer reviewer and session chair for many conferences

## **Music-related**

2005	<i>Create your own software synthesizer</i> , 3 part article, O'Reilly Digital Media
2004-2005	Create virtual synthesizer emulations of Mixturtrautonium (1940s), Roland and Yamaha (1970s) synthesizers Create remixes for record label Non-Zero
1993-1997	Synthesizers and saxophone in various electronic, African and reggae musical groups
1981-1987	Synthesizers and clarinet in various rock, electronic and folk musical groups, highlights including LP album "Radeum" and collaborating on electronic piece on large Moog at NSW Conservatorium

## **Academic**

B. Economics, University of Sydney, 1979 -1982, 1985 (majors in business law, economics, minor in computer science)

## **Personal**

Born: Goondiwindi, Qld, Australia 18 May, 1960  
Citizenship: Australian. UK citizenship available if required  
Marital: single