Andrew Roberts

Hertfordshire, UK

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I am passionate about technology and have a deep understanding of the subject and its potential. I possess strong communication skills and I can articulate complex topics to others regardless of technical background. I have always been a determined and ambitious person and relish leading teams to deliver great digital solutions.

Experience

Jellybooks Ltd. *London*

Senior developer & technical co-founder *October 2014–present*

- Lead developer of large Ruby-on-Rails web-application, backed by MySQL and MongoDB databases. Stack also includes: JavaScript for interactive components, internationalisation, background workers, file uploads, transactional emails, mailing lists, internal APIs, monitoring.
- Collaborated closely and frequently with CEO and data scientist, and all contractors (such as designers or additional front-end developers), following an agile methodology, to continually deliver on customer & product requirements in an efficient manner.
- Rolled out advanced (and fully transparent) reader analytics service. Winner of an *Innovate UK* grant: the first service ever to work within 3rd party reading apps, such as iBooks. Provided wide range of analytics dashboards, tables, charts (D3.js) and offline reports.
- Responsible for "peek inside" samples service to support three classes of user: i) for readers, one-click reading; ii) for retailers, customisable excerpts and embeddable links via web app or API; iii) for publishers, bulk content ingest and analytics for pre-/new-release campaigns. Almost 70k samples and growing. Deployed in-house instance of Meilisearch to power our book search engine.
- Listened to, and worked directly with, clients and users to evolve the user experience. User and client feedback had the highest priority and we took pride in delighting clients by delivering improvements rapidly: hours/days rather than weeks/months.
- Produced asset streamer microservice API in TypeScript/NodeJS+Express for better separation of concerns and improved asset throughput.
- Integrated cloud-based storage for greater flexibility, performance and scalability: AWS S3 for master file storage; Azure Blob Storage and CDN for asset streaming.
- Authored several e-book utilities that are critical to service delivery, including watermarking, version converter, automatic sample generator. Contributed fixes and enhancements to several open-source projects.

Ayr Digital Ltd. *Hertfordshire*

Digital Publishing Consultant *2010–2015*

I became an independent software and digital publishing consultant. I focused primarily on online and mobile projects, although I utilised my specialist skill-set to deliver on the wide range of needs within publishing and education sectors. Highlights include:

- Pearson: Longman Dictionaries Online (Global & USA) web platforms (developer); Pearson Vocabulary Trainer online learning/revision system (project manager and data programmer); Android app development (project manager).
- Society of Young Publishers: relaunched website on CMS platform; supported subscriptions, events calendar, jobs board, news. (developer)
- ExamEnglish: iOS app platform for interactive practice tests for learners of English (developer)

Pearson Education (Pearson PLC) *Harlow, Essex*

Project Manager (Technology) *2009–2010*

A broad and hands-on role managing the delivery of digital components across CD-ROM, online and mobile platforms for key titles within the ELT division. I had a strong focus on digital dictionaries and mobile products.

- Responsible for establishing technical specifications; identifying external suppliers; negotiating quotes and overseeing contracts. Creating schedules and project budgets, and ensuring that neither are exceeded.
- Liaising with content providers, both internal and external: authors and editors, sound & vision studio, design, picture research.
- Oversee external and internal software development. Supervisor for in-house web developer.
- Provided guidance to the digital strategy for Pearson Longman's ELT Dictionaries. Advise on technical aspects and report on digital trends.
- Contributed to technical architecture, interoperability standards and digital asset management (audio, images, activities and other important data). Particular emphasis to content being used within learning management systems (LMS).
- Developed the Longman Dictionaries iPhone platform and released nine profit-making iPhone apps.
- Authored tools to permit simpler reuse of dictionary assets throughout the division and improve digital workflows.

Pearson Education (Pearson PLC) *Harlow, Essex*

Senior Dictionaries Data Programmer (Technology) *2005–2009*

A key role shared across the Technology and Dictionary departments. Responsible for CD-ROM/electronic media production, dictionary data preparation and corpus development.

- Project manager for dictionaries CD-ROMs: taking a product from planning and specification stages all the way through to implementation, testing and acceptance.
- Electronic media data processing: extracting dictionary data and linking multimedia assets to be consistent with agreed data formats to be used within CD-ROMs, online services, mobile and electronic handheld devices.

- Development and maintenance of interactive exercise templates, conversion system, and exercise repository for use within multimedia products.
- Set up new dictionary project data according to publisher's brief: data processing includes removing unneeded components, add entries from other projects (ensuring DTD conformance), add components from external resource databases, etc.
- Data preparation to produce resources for 3rd party licensees (e.g., dictionary XML data, headword audio, etc.)
- Development and maintenance of in-house data processing libraries and lexicographic tools. Managed in-house bug-tracker database and wiki server.
- Organising corpus selection and acquisition; specifying and coordinating 3rd party corpus development when required. Apply post-processing including part-of-speech tagging and lemmatisation, plus data normalisation to conform to bespoke corpus management system formats.

University of Leeds *Leeds, West Yorkshire*

Teaching Assistant *2002–2005*

During post-graduate studies, I was employed as a teaching assistant on an ad-hoc basis to assist lecturers in all aspects of undergraduate course delivery.

- Temporary lecturer for Mathematics for Computing II course (2005).
- Tutor for Mathematics for Computing I & II, and Natural Language Processing courses.
- Practical session supervisor and coursework assessor for various courses including: *Natural Language Processing*, *Introduction to Databases*, *Objected Orientated Software Engineering*, *Introduction to Computer Systems*, *Tools for Knowledge Discovery*, *Technologies for Knowledge Management*, *Database Principles and Practice*, *Introduction to Human Computer Interaction*.

Computing Skills

Programming	Ruby, Java, Python, JavaScript/TypeScript, HTML, CSS; LaTeX, SQL, PHP, XML, XSLT, Objective-C, Bash.
Technologies	Ruby on Rails, MySQL, MongoDB, NodeJS, D3.js, nginx, Meilisearch, Solr, Lucene, git.
Operating Systems	Mac OSX, Linux, Windows.

Additional Experience

Editorial board *January 2008*

The International Arab Journal of Information Technology.

Member of programme committee *June 2005*

Special Session on Evolutionary Grammatical Inference (EGI2005) at the 5th International Conference on Intelligent Systems Design and Applications (ISDA2005), Wroclaw, Poland.

Getting to Grips with LaTeX *2003–present*

Authored a series of LaTeX tutorials to help beginners become competent in using the markup required for typical scientific documents. These tutorials were also used as the initial content of the LaTeX wikibook.

Technology writer *2005-2010*

InfoQ.com—an enterprise technology website; articles covering Java technology. OSNews.com—a technology website; articles were typically about aspects of the Java platform, and occasionally discussion on Linux operating system distributions or typesetting. BookMachine.org—a publishing blog.

Education

MPhil in Computational Linguistics *Leeds, UK*

University of Leeds *October 2009*

BSc (Hons) in Computer Science *Leeds, UK*

University of Leeds *July 2002*

Interests

I'm an active person and enjoy long-distance running and strength training. I'm an avid reader and enjoy a wide variety of genres in both fiction and non-fiction. I also enjoy writing, largely technology-related articles. I've recently taken up learning the guitar and am still learning the basics. I am teaching my son coding and we frequently collaborate on simple game development. I recently became a servant to a young cat.