

## Curriculum Vitae

1. Name: Andrew MacFarlane

2. Degrees:

- 1996–2000: PhD from the Department of Information Science, City University London  
*Sponsors:* Arts and Humanities Research Board (AHRB funded studentship)  
*Thesis Title:* Distributed Inverted files and Performance: A study of parallelism and data distribution methods in IR  
*Supervisors:* Prof. Stephen Robertson and Dr Julie McCann  
*External Examiners:* Prof. Peter Willett (Sheffield) and Prof. Alan Smeaton (Dublin City)
- 1993–1994: MSc Advanced Method in Computer Science (with *merit*)  
Department of Computer Science, Queen Mary University of London (EPSRC funded studentship)  
*Modules:* Distributed Data and Algorithms, Distributed Operating Systems, Parallel Architecture and Algorithms, Virtual Environments and Multi-Media.  
*MSc Project:* Parallel Vector Space Text Retrieval, with Prof. Yakup Paker.  
*Internal Examiners:* Prof. Richard Bornat and Prof. Helen Liddell
- 2002-2003: Postgraduate Certificate in Academic Practice  
*Modules:* Teaching Learning and Assessment, Academic Development for Students, Quality Enhancement and Evaluation, Discipline-Based Practice.
- 1990–1993: BSc Computer Science, 1<sup>st</sup> Class Honours, University of Westminster  
*Project:* Parallel Text Retrieval, with Mr Sean Tohill.

3. Professional qualifications:

- Professional member of the British Computer Society (MBCS), elected 12<sup>th</sup> July 2001.
- Chartered Engineer (CEng), elected 18<sup>th</sup> October 2001.
- Chartered Member of the British Computer Society (CITP), elected 1<sup>st</sup> May 2004.
- Professional Member of the Association for Computing Machinery, elected November 2000.

4. Employment record:

- August 2006 – Present                      Senior Lecturer in Information Science, City University London
- September 2001 – July 2006:              Lecturer in Information Science, City University London
- September 2000 – June 2001:              Software Engineer and Researcher, BrightStation PLC, Cambridge.
- April 1999 – October 1999:                Research Intern, Microsoft Research Cambridge.
- October 1994 to September 1996:        Research Assistant, London Parallel Application Centre, Queen Mary University of London
- July 1977 to September 1990:              Civil Servant, Property Services Agency, Department of the Environment, London

As a PhD student at City University, I was a part-time postgraduate tutor supporting the following modules: Text Processing, WWW Document Processing and Retrieval, Database Systems.

As an undergraduate I undertook summer vacation work for the University of Westminster updating and maintaining a Module-2 interface to a Fortran Graphics Library.

## (a) Research and Scholarship

Up to recently the focus of my research was on Parallel Computing for Information Retrieval, my PhD thesis work. I have now diversified into a number of different areas and have a more general research agenda to fit in with my role as the co-director of the Centre for Interactive Research, which includes the following;

- Disabilities and information retrieval in general, dyslexia in particular. I have designed a research experiment to collect information on the information seeking behaviour of dyslexics which has been approved by the ethics committee.
- Optimising Term Selection for Information Filtering using Local Search (with Dr Andrew Tuson of Computing). I am writing a paper with Andrew Tuson on this subject, and have a PhD candidate interested in completing his thesis in the area.
- Artificial Immune techniques as applied to information retrieval (with Dr Jon Timmis, University of York). I have designed an experiment and have built a program with researchers at the University of Kent to examine the use of evolutionary algorithms as applied to the term selection problem.
- Geographical Information Retrieval (with the GIS group in Information Science). I am currently defining a research agenda with the Geographical Information Science Group.

My other research interests include Image Retrieval (with Ms Pauline Rafferty of Information Science), Term weighting methods (with Dr Jeremy Pickens of FxPal, Palo Alto, U.S.A.), Music Retrieval (with the Music Informatics group in the Department of Computing) and Open Source Software Development. I am keen on building links to researchers throughout the School to build in this research agenda, linking with outside researchers as and when required. I am involved in a project to replace the Okapi system with an open source alternative (Okapi++),

### *Publications and Conference Presentations*

I have over 30 peer reviewed publications (largely in the realm of information retrieval) including papers in leading international journals such as the Journal of Documentation, ASLIB proceedings and World Patent Information. I have presented much of my PhD work at Conferences and have a number of papers I am working on for presentation. I am very active in peer review for my area including programme committee membership for the two major IR conferences (SIGIR and ECIR) and journals such as the Journal of Documentation and the Journal of Information Science (see External and Professional Contribution section for more details). I gave a presentation on the prospects for Artificial Immune systems as applied to IR, at the University of Kent in Autumn 2004.

### *Research Grants and Financial Support*

In terms of research grants and consultancy I have successfully secured the following external awards:

Awarding Body	Description of Financial Support	Details	Size of Award
<b>Microsoft Research Cambridge</b>	Research Project: Improving tools for investigating linguistic and probabilistic models in IR: an XML indexer for Okapi	Contract Dates: 1st September 2002 to 31 March 2003	£24,000.00
<b>Microsoft Research Cambridge</b>	Consultancy	Maintaining Okapi	£8,000.00
<b>Mitre Corporation.</b>	Consultancy	Provision and consultation on Okapi for RIA workshop, Summer 2003.	£7,810.97
<b>EPSRC</b>	Research project: financial support for conference - ECIR 2006. Final evaluation: outstanding.	Support for student and keynote speaker attendance of ECIR 2006.	£13,194.00
<b>City University</b>	Pump Priming for Dyslexia in IR project	Support from the University to further Dyslexia and IR Research (with Dr Zaphiris and Dr Marshall).	£4,992.00

The 'XML indexer for Okapi' and Mitre Corporation consultancy project have been completed very successfully, while the 'Maintaining Okapi' project is still ongoing. The code written for the 'XML indexer for Okapi' project is available for researchers for a small fee of 100 pounds which I administer. I have tentative plans to write grant proposals for Dyslexia in IR (with Dr Panayiotis Zaphiris and Chloe Marshall) and Artificial Immune techniques for IR (with Dr Jon Timmis).

### *Research Management and Supervision Activities*

My primary research management role has been co-directing the Centre for Interactive Systems Research with Prof. Stephen Robertson. I am currently leading the process for re-focusing the research of the CISR in order to take the centre forward into areas such as Image Retrieval where we have particular expertise due to new members joining the Centre (Pauline Rafferty and Prof. Peter Enser). I am a category 'A' supervisor – I am able to take the primary role as a supervisor.

Here is a list of completed PhD students:

- Andrew Boyd. (2005). Introducing the Goal-Based Information Framework (GbIF): Documentation and evaluation of Information Flow in the Low Maturity Organisation, PhD Information Science. (2<sup>nd</sup> supervisor, 1<sup>st</sup> Supervisor Prof. David Nicholas).

I am currently supervising the following PhD students:

- Jagdev Bhogal (2<sup>nd</sup> Supervisor. Primary supervisor: Dr. Peter Smith Dept. of Computing). Ontologies and IR.
- Tamar Sadah (1<sup>st</sup> Supervisor. 2<sup>nd</sup> Supervisor: Prof Stephen Robertson). Search interfaces
- Asaad Albrair (1<sup>st</sup> Supervisor. 2<sup>nd</sup> Supervisor: Prof Stephen Robertson). Dyslexia and IR.
- Charlie Inskip (1<sup>st</sup> Supervisor. 2<sup>nd</sup> Supervisor: Pauline Rafferty). Music needs for Music professionals.
- Sam Davies (1<sup>st</sup> Supervisor. 2<sup>nd</sup> Supervisor: Dr George Buchanan). Classifying TV programs by Genre.
- Daniel Wolff (2<sup>nd</sup> Supervisor. 1<sup>st</sup> Supervisor: Dr Tillman Weyde). Culture aware Music IR

#### **(b) Administration, management and academic leadership**

I have taken a leading role in managing research studies in both the School and my Department, as well as leading the administration of postgraduate taught courses in the Department. Details of my administration and management roles are as follows.

I am *Senior Tutor for Research* (from 2002 to 2005, 2007 to date) for the Department of Information Science. In this role I have been involved in a full scale review of progression for the Head of Department, including such activities as inspecting 6 monthly and yearly reports. I have been actively involved in recruitment of PhD students, including the success in gaining two AHRB studentships. I have chaired many viva voce examinations (20+) in my role as STR (many of which have been done for other Departments and Centre's in SOI). I am also the chaired the *Research Students Committee* (from 2003 to 2005, 2008 to 2010), a school wide body set up both to look after the interests of PhD students in the school and to set policy for research studies as sub-committee of the SOI Board of Studies. My role here has been to address the concerns of PhD students in areas such as problems with finance etc, and to lead policy making by submitting papers to BoS as necessary, such as the recent policy on transfer of supervisors from category 'B' to category 'A'. My role as chair of the RSC automatically gave me a seat on the University's *Research Degree Committee*, which sets policy for research studies at the University level. I was actively involved in the work of this committee, approving a new route for PhD by publication (led by a need for this type of PhD mode in the School). I am a member of the School of Informatics *Ethics Committee*.

I am Director for the *Information Systems and Technology Scheme*, (from August 2004 to June 2005 and January 2006 to date), which has six routes in it:

- MSc *Information Systems and Technology*
- MSc *Information Systems*
- MSc *Information Management*
- MSc/MA *Electronic Publishing*
- MSc *Geographical Information Systems*
- MSc *Geographical Information Management*

My primary role here was to give overall direction to the scheme, such a reviewing elements of each route (together with the scheme team), individual pathways through each of the routes etc. I lead the process of the Annual Course review, which feeds into Schools Course review process. I also run SSLC meeting in order to support students in the scheme, and am very active in addressing their concerns. I am route director for the MSc in *Information Systems and Technology*, which largely involves personal tutoring. I have been the admissions tutor for IS&T since September 2001, and took over the admissions role for the whole scheme (including the EP and GI routes) earlier this year. As admissions tutor I attend all the SOI Open Days.

I am a committee member of the Board of Studies for the School, and have been involved in such process as undertaking course reviews for the MSc *Health Informatics* and MSc *Healthcare Technologies*, as well as undertaking a review of the Schools undergraduate provision. Work in BoS as the chair of the RSC is mentioned above. My role as RSC chair also gave me a seat on the Research committee, where I have reported on issues related to research studies that have come from both RSC and the University Research Degrees Committee. My role as IS&T Scheme director also gives me a seat on the the Postgraduate Management team, where I present issues important to the scheme as well as helping in the direction of studies in the School.

I have or am undertaken the following PhD Viva Voce and/or examinations:

- Stephanie Marsh, Department of Information Science, City University London, Internal. Thesis: “Human centered evaluation of Geovisualisation”.
- Ian Greatbatch, Department of Information Science, City University London, Internal. Thesis: “An Ethnophysiological approach to investigating the prominence of mountain features”.
- Ahmad Abusukhon, Department of Computing, University of Sunderland, External. Thesis: “An investigation into improving the load balance and query throughput of distributed information retrieval systems”.
- Areej Al-Wabil, Centre for HCI Design, City University London, Internal. Thesis: “The effect of Dyslexia on Web Navigation”.
- Maxym Sjachyn, School of Electronics and Computer Science, University of Westminster, External. Thesis: “Semantic Component Selection”.
- Hengzhi Wu, Department of Computer Science, Queen Mary University of London, External. Thesis: “Techniques for Improving Efficiency and Scalability for the Integration of Information Retrieval and Databases”.
- Carlos Martín, Department of Computing and Artificial Intelligence, “XML and IR”. [Thesis report only].

### (c) Teaching and course development

I have been very active in both the development of curricula in the School as well as delivering modules of all types (information, systems and technology focused modules) mostly for the *Information Systems and Technology* and *Information Studies* Schemes.

As course team member (together with Dr Penny Yates-Mercer and Dr Vesna Brulic-Okretic), I was heavily involved in redesigning the 10 module MSc *Information System and Technology* into three routes through an 8 module IS&T scheme. This involved the successful proposal of two new routes through the scheme: MSc *Information Management* and MSc *Information Systems*. The MSc in *Information Management* was proposed in order to target a perceived gap in the market, for applicants who manage information and data, but who do not necessarily need a heavy technological focus. The MSc in *Information Systems* was proposed in order to recruit students interested in becoming programmer/analysts.

As *Information System and Technology* scheme director, I have managed the process for re-accrediting the *Information System and Technology* route, and for obtaining pre-accreditation for the *Information Systems* route from the BCS. I have also been involved in transferring the CILIP accreditation for the MSc *Information System and Technology* (Information Pathway) to the MSc *Information Management*.

I have successfully proposed and designed a new module for the *Information System and Technology* scheme, called *Open Source Systems*. This is an area of growing interest in the IT world, and it was felt that this course would give the scheme an edge in recruiting new and able students. This module was successfully completed for the first time in 2005 and continues to be developed in the light of new developments. I have particular expertise in this area, having been involved in Open Source software development while working for Brightstition PLC. The module has been delivered to the MSc in *Software Engineering* for the first time in 2006.

I have successfully redesigned (from a 12 credit module) and delivered a 15 credit Information Retrieval super-module (delivered to both Information Science and Computer Science postgraduates). The three routes through this super-module are *Information Retrieval*, *Digital Libraries* and *Pharmaceutical Data Systems*. This involved identifying the core areas for these three modules, related to search and evaluation of retrieval systems, and delivering appropriate material to all three student groups.

My teaching ethos is focused on actively bringing the knowledge gained whilst undertaking my research in order to inform my teaching. I regard teaching and research as being inextricably linked and I review my course material continuously in the light of new developments in the field. I have been module leader for the following postgraduate modules while being a lecturer at City University:

- INM304: *Digital Libraries* (2004/2005 jointly, 2005/2006 jointly, 2006/2007 jointly, 2007/2008 jointly, 2008/9 jointly, 2009/2010)
- INM305: *Information Retrieval* (2004/2005, 2005/2006 jointly, 2006/2007 jointly, 2007/2008 jointly, 2008/9 jointly, 2009/2010 jointly)
- INM306: *Pharmaceutical Data Systems* (2004/2005 jointly, 2005/2006 jointly)
- INM309: *Open Source Systems* (2004/2005, 2005/2006, 2006/2007, 2007/2008, 2008/9, 2009/2010)
- INM348: *Digital Information Technologies and Architectures* (2007/2008, 2008/2009, 2009/2010, 2010/2011)
- INM131: *Information Retrieval Systems and Applications* (2001/2002, 2002/2003, 2003/2004)
- INM129: *Information Sources, Users and Retrieval* (2001/2002, 2002/2003, 2003/2004)
- INM137: *Web Document Processing* (2001/2002 [2 deliveries], 2002/2003, 2003/2004)
- INM147: *Online Information Retrieval* (2001/2002, 2002/2003, 2003/2004, all jointly)

I have also delivered lectures and been involved in assessments for the following courses:

- INM348: *Digital Information Technologies and Architectures* (2004/2005 – 3 sessions, 2006/2007 – 3 sessions, labs, 2010/2011 – 3 sessions, labs)
- INM139: *Data Representation and Management* (2001/2002, 2002/2003, 2003/2004 – labs only)
- INM356: *Research Evaluation and Communication Skills* (2002/2003, 2003/2004 – 1 lecture, assessments)
- INM128/INM188: *Information Management* (2002/2003, 2003/2004 – 1 lecture)
- IN2008: *Information Management* (2003/2004 – 2 lectures)
- M642: *Fundamentals of Information Science* (2001/2002 – 1 lecture)

I have developed online content for all of these modules, which are available to students on CitySpace.

The main focus of project supervision has been at postgraduate level either for the *Information Studies* or *Information Systems and Technology* schemes. I have recently started to supervise a limited number of undergraduate projects in order to support the Okapi++ project.

Overall the feedback for my teaching is very good and I have been able to use student reviews in order to improve my delivery in terms of both style and content. I have been recognised for my teaching skills by students, having been nominated for a ‘Student Voice award’ in 2009. I was also recognised by my peers being awarded second joint prize in the Schools own Learning and Teaching awards 2009. I have a number of publications in the area of teaching IR, and an edited book in preparation.

#### **(d) External and professional contribution**

I am very active in the information retrieval community, being involved very heavily in the life of professional societies, conference organisation and peer reviewing. My work in these various areas is raising my profile in the IR community.

##### *Professional Positions*

- British Computer Society Information Retrieval Specialist Group (BCS IRSG). Committee member since 1999, secretary since 2003. I have also been the Webmaster for the specialist group for four years. I edit a section on academic conferences for the IRSG newsletter, the ‘Informer’.
- Member of BSI Standards Committee on Information and Documentation, Computer Applications in Information and Documentation Sub-Committee and Identifiers and Metadata in Information and Documentation Sub Committee.

##### *Conference Organisation*

- Programme Committee member of SIGIR 2004: 27<sup>th</sup> Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. Posters and demonstrations, IR in context Workshop.
- Programme Committee member of SIGIR 2005: 28<sup>th</sup> Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. Posters and demonstrations, IR in context Workshop.
- Programme Committee member of SIGIR 2006: 29<sup>th</sup> Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. Posters and demonstrations.
- Programme Committee member of SIGIR 2007: 30<sup>th</sup> Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. Posters and demonstrations.
- Programme Committee member of SIGIR 2008: 31<sup>st</sup> Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. Full papers, posters and demonstrations.

- Programme Committee member of SIGIR 2009: 32<sup>nd</sup> Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. Full papers, posters and demonstrations.
- Programme Committee member of SIGIR 2010: 33<sup>rd</sup> Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. Full papers, posters and demonstrations
- Webmaster and organising committee member IRSG 2000: 20<sup>th</sup> Annual BCS IRSG Colloquium on Information Retrieval Research
- Programme Committee member of ECIR 2004: 26<sup>th</sup> European Conference on Information Retrieval Research.
- Programme Committee member of ECIR 2005: 27<sup>th</sup> European Conference on Information Retrieval Research. Session chair.
- Treasurer, Webmaster, Sponsorship, Chair and Programme Committee member for ECIR 2006: 28<sup>th</sup> European Conference on Information Retrieval Research. Session chair.
- Programme Committee member of ECIR 2007: 29<sup>th</sup> European Conference on Information Retrieval Research.
- Programme Committee member of ECIR 2008: 30<sup>th</sup> European Conference on Information Retrieval Research, member of Best Poster Committee.
- Programme Committee member of ECIR 2009: 31<sup>st</sup> European Conference on Information Retrieval Research.
- Programme Committee member of ECIR 2010: 32<sup>nd</sup> European Conference on Information Retrieval Research. Best paper award panel.
- Programme Committee member of ECIR 2011: 33<sup>rd</sup> European Conference on Information Retrieval Research. Workshops PC.
- BCS IRSG FDIA 2007: BCS-IRSG Symposium on Future Directions in Information Access/Retrieval. Programme Committee Chair.
- BCS IRSG FDIA 2008: BCS-IRSG Symposium on Future Directions in Information Access/Retrieval. Organising committee.
- BCS IRSG FDIA 2009: BCS-IRSG Symposium on Future Directions in Information Access/Retrieval. Organising committee.
- BCS IRSG Industry Day 2006 Organising Committee. Session Chair.
- BCS IRSG Search Solutions 2007 Organising Committee. Session Chair.
- BCS IRSG Search Solutions 2008 Organising Committee. Session Chair.
- BCS IRSG Search Solutions 2009 Organising Committee. Session Chair.
- BCS IRSG Search Solutions 2010 Organising Committee. Session Chair.
- First International Workshop on Teaching and Learning in Information Retrieval (TLIR'07), Organising Committee, Programme Committee, Session Chair.
- Second International Workshop on Teaching and Learning in Information Retrieval (TLIR'08), Organising Committee, Workshop at IiX 2008.
- Programme Committee member of ISMIR 2003: 4<sup>th</sup> International Conference on Music Information Retrieval.
- Programme Committee member of ISMIR 2004: 5<sup>th</sup> International Conference on Music Information Retrieval.
- Programme Committee member of ISMIR 2005: 6<sup>th</sup> International Conference on Music Information Retrieval.
- Programme Committee member of ISMIR 2006: 7<sup>th</sup> International Conference on Music Information Retrieval.
- Programme Committee member of COLIS 2005: 5<sup>th</sup> international conference on Conceptions of library and information science - Context: nature, impact and role. Session Chair.
- Programme Committee member of 17<sup>th</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of 18<sup>th</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of 19<sup>th</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of 20<sup>th</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of 21<sup>st</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of 22<sup>nd</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of 23<sup>rd</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of 24<sup>th</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of 25<sup>th</sup> ACM Symposium on Applied Computing (SAC), Special Track on Information Access and Retrieval Systems.
- Programme Committee member of IADIS International Conference WWW/Internet 2004.
- Programme Committee member of IiX 2007 - First Symposium on Information Interaction in Context. Panel member as Senior Researcher at conference Doctoral Forum.

- Programme Committee member of IiX 2008 - Second Symposium on Information Interaction in Context.
- Programme Committee member of IiX 2010 – Third Symposium on Information Interaction in Context.
- Programme Committee member of SPIRE 2006 – 13<sup>th</sup> edition of the Symposium on String Processing and Information Retrieval
- Programme Committee member of SPIRE 2007 – 14<sup>th</sup> edition of the Symposium on String Processing and Information Retrieval
- Programme Committee member of CIKM 2006, Retrieval Track – ACM Conference on Information and Knowledge Management
- Programme Committee member of CIKM 2007, Retrieval Track – ACM Conference on Information and Knowledge Management
- Programme Committee member of CIKM 2008, Retrieval Track – ACM Conference on Information and Knowledge Management
- Programme Committee member of CIKM 2009, Retrieval Track – ACM Conference on Information and Knowledge Management.
- Programme Committee member of CIKM 2010, Retrieval Track – ACM Conference on Information and Knowledge Management. Tutorial Co-Chair.
- Programme Committee member of ICSC 2007 - First IEEE International Conference on Semantic Computing
- Programme Committee member of AIRS 2008 - Fourth Asia Information Retrieval Symposium.
- Programme Committee member of AIRS 2009 – Fifth Asia Information Retrieval Symposium.

#### *Journal Peer Review*

- Reviewer for the Journal of Documentation.
- Reviewer for Information Retrieval.
- Reviewer for the Journal of Information Science.
- Reviewer for ASLIB proceedings.
- Reviewer for Information Processing and Management
- Reviewer for International Journal of Geographical Information Science
- Reviewer for Journal of Digital Information Management
- Reviewer for Journal of the American Society for Information Science and Technology
- Reviewer for Journal of Librarianship and Information Science
- Reviewer for Information Research
- Reviewer for Recent Patents in Computer Science

#### *Project Reviews*

- Project reviewer for the Netherlands Organisation for Scientific Research (NOSR).
- Project reviewer for the Engineering and Physical Sciences Research Council (EPSRC).
- Project reviewer for the Arts and Humanities Research Council (AHRC).
- Project reviewer for the Swiss National Science Foundation (SNSF).

#### *Editorial Boards*

- Journal of Information Science.

#### *Additional Information*

I gave a talk on Web Search to the Stationers Livery Company in the City of London in April 2008.

I delivered a talk on Local Search in IR to the Department of Computing, University of Glasgow in March 2007.

Together with Richard Boulton of Lemur Consulting, I delivered a talk on ‘Open Source IR’ to the Open Source and Information Retrieval Specialist groups of the BCS in November 2006.

Together with David Mountain of the giCentre, I delivered a talk on ‘Geographical Information Retrieval’ to the BCS Geospatial Specialist Group in June 2006.

I delivered a lecture on Online IR Systems at Thames Valley University in April 2004.

I have attended many training courses and seminars whilst at City University including Academic Induction, Peer Observation, teaching large groups, research grant training.

As Senior Tutor for research, I arranged seminars for the Department of Information Science, usually as part of the 'Summer in the City' Seminar series traditionally held in June/July of each year.

I have knowledge of the following programming languages; C, C++, Pascal, Modula-2, SML, Prolog, Basic, SQL, Z80 assembler, & machine language, Fortran 77, TCL/TK, Parallaxis and Occam-2. I keep my programming skills updated through my involvement in the Okapi++ project.

I acted as a judge for the Ex Libris Software extensions contest for 2009/2010.

I have a full and clean UK driving license.

#### *Secondary and Further Education*

1989-1990      Access to Computing, Paddington College, Maida Vale, pass 85% overall.

1970-1977:      John Kelly High School for Boys. 5 CSE's including grade 1 in English (Grade C O'Level equivalent).

#### *Referees*

1. **Prof. Stephen Robertson, Microsoft Research Cambridge, Roger Needham Building, 7 J J Thomson Ave, Cambridge CB3 0FB, UK**
2. **Dr Martin Porter, 49 Park Lane, Norwich NR2 3EF.**
3. **Prof. David Nicholas, S.L.A.I.S., University College London, Gower Street, London WC1E 6BT, UK.**

#### *Summary of Publications*

Copies of the papers listed here are available on request in most cases.

#### *In Preparation/Submitted*

The publications I have submitted or are in preparation are given below. Working titles/intended targets have been provided.

#### *In Preparation*

1. A. MacFarlane, A. Al-Wabil, C. Marshall, and A. Albrair. The effect of dyslexia on IR interfaces. Target: JDoc/IP&M etc.
2. A. MacFarlane, C. Marshall, and A. Albrair, and G. Buchanan. Dyslexia and IR: a further study. Target: JDoc/IP&M etc.

#### *Submitted*

1. A. MacFarlane, Using Multiple Choice Questions to assist learning for Information Retrieval, submitted for inclusion into Springer-Verlag book on Teaching and Learning in IR.

#### *Journal Papers*

1. Inskip, C. MacFarlane, A., and Rafferty, P. (2010). Creative Professional users' musical relevance criteria. *Journal of Information Science*, 36(4).
2. A. MacFarlane, A. Secker, P. May and J. Timmis, (2010). An experimental comparison of a Genetic Algorithm and a Hill-Climber for Term Selection. *Journal of Documentation*, 66(4).
3. A. MacFarlane, A. Al-Wabil, C. Marshall, S. A. Jones, A. Albrair, and P. Zaphiris. (2010). The effect of dyslexia on Information Retrieval: a pilot study. *Journal of Documentation*, 66(3).

4. Wei Lu, A. MacFarlane and F. Venuti. (2009). Okapi based XML indexing. *ASLIB Proceedings*, 61(5).
5. J.M. Fernandez-Luna, J.F. Huete, and A. MacFarlane. (2009). Introduction to the special issue of Teaching and Learning in IR, Special Issue of Teaching and Learning in IR, *Information Retrieval*, 12(2).
6. J.M. Fernandez-Luna, J.F. Huete, A. MacFarlane and E. Efthimiadis, (2009). Review of Teaching and Learning in IR, Special Issue of Teaching and Learning in IR, *Information Retrieval*, 12(2).
7. A. MacFarlane. (2009). Teaching Mathematics for search using a Tutorial Style of Delivery. Special issue on Teaching and learning in IR, *Information Retrieval*, 12(2).
8. A. MacFarlane and A. Tuson. (2009). Local Search: A guide for the Information Retrieval Practitioner, *Information Processing and Management*, 45 (1).
9. C. Inskip, A. MacFarlane and P. Rafferty. (2008). Meaning, communication and Information Retrieval, *Journal of Documentation*, 64(5).
10. C. Inskip, R. Butterworth and A. MacFarlane (2008). Creating A Digital Library Which Supports The Information Needs Of Folk Music Users, *Information Processing and Management*, 44(2).
11. D. Mountain and A. MacFarlane (2007). Meeting the needs of mobile users of information systems. *Journal of Information Science*, Vol. 33, No. 5.
12. J. Bhogal, A. MacFarlane and P. Smith (2007), A Review of Query Expansion and Context in Information Retrieval, *Information Processing and Management*, Vol. 43, No. 4.
13. A. MacFarlane (2007). Evaluation of Web Search for the Information Practitioner, *ASLIB proceedings: New Information Perspectives*, Vol. 59, No. 4/5.
14. A. MacFarlane, J.A. McCann and S.E. Robertson (2007). Parallel methods for the update of partitioned inverted files, *ASLIB proceedings: New Information Perspectives*, Vol. 59, No. 4/5.
15. A. MacFarlane, S.E. Robertson and J.A. McCann (2005). Parallel methods for the generation of partitioned inverted files, *ASLIB proceedings: New Information Perspectives*, Vol. 57, No. 5.
16. G. Richter and A. MacFarlane (2005). The impact of metadata on the accuracy of automated patent classification, *World Patent Information* 27.
17. A. MacFarlane, J.A. McCann and S.E. Robertson (2004). Parallel computing for Passage Retrieval, *ASLIB proceedings: New Information Perspectives*, Vol. 56, No. 4.
18. P Vakkari, S Jones, A MacFarlane and E Sormunen (2004). Query exhaustivity and Relevance Feedback, *Journal of Documentation*, Vol. 60 No. 2.
19. A. MacFarlane (2003). On Open Source IR. *ASLIB proceedings: New Information Perspectives*. Vol. 55, No. 4.
20. A. MacFarlane, S.E. Robertson and J.A. McCann (1997). Parallel Computing in Information Retrieval - An Updated Review, *Journal of Documentation*, Vol. 53, No 3.

#### *Book Chapters*

1. A. MacFarlane. (2009). Models Performance Issues in Parallel Computing for Information Retrieval , In: A. Goker and J. Davies (eds), *Searching in the 21<sup>st</sup> Century*, John Wiley.

#### *Conference and Workshop Papers*

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