

C V (R E S U M E)



PERSONAL DETAILS

Name: Jovan Pehcevski
Date of Birth: 14th June 1972
Place of Birth: Skopje, Republic of Macedonia
Marital status: Married, with Irena Pehcevski
Children: Matej and Andrej Pehcevski (3-year old twins)
Residential Address: Gjorgji Sugare 2/2-14,
1000 Skopje, Republic of Macedonia

CONTACT INFORMATION

Location: Faculty of Informatics,
European University
Kliment Ohridski Blvd 68,
1000 Skopje, Republic of Macedonia
Phone : +389 2 320 2033
Fax: +389 2 320 2030
Mobile: +389 70 680 005
E-mail: jovan.pehcevski@acm.org
Web: <http://www.cs.rmit.edu.au/~jovanp>

RESEARCH INTERESTS AND STRENGTHS

- Focused and cross-lingual information retrieval
- Evaluation of focused and content-oriented XML retrieval
- Entity retrieval and knowledge discovery
- Native XML databases
- Web servers and web technologies
- Web database applications and Internet programming
- Web and enterprise security
- Relational database systems

EDUCATION

17/09/2002 – 28/08/2006

PhD in Computer Science

**School of Computer Science and Information Technology, RMIT University
Melbourne, Australia**

Thesis topic: “Evaluation of Effective XML Information Retrieval”

Supervisors: Dr. James Thom and Dr. Saied Tahaghoghi (RMIT University)

External consultant: Dr. Anne-Marie Vercoustre (INRIA, France)

01/10/1991 – 26/06/1996

Graduated Electro-Technical Engineer (Computer Science, Informatics and Automatics)

**University "St. Cyril and Methodius" - Faculty of Electrical Engineering,
Skopje, Republic of Macedonia**

Graduation (Honours) thesis: “Integrating Oracle database with Lotus Notes”

Supervisor: Prof. Dr. Aksenti Grnarov (Faculty of Electrical Engineering)

HONOURS AND AWARDS

2002 – 2006

Google *Industry Award* for Academic Excellence in Doctor of Philosophy (PhD) program

Australian *International Postgraduate Research Scholarship* (IPRS)

RMIT University *School of CS & IT Top-up Scholarship*

Award for best research report, Research Methods (Semester 1, 2003)

Exploring Teaching And Learning (ETAL) – certificate of completion (November 2003)

1991 – 1996

Regular scholarship awarded by the Ministry of Education of Republic of Macedonia to talented students with advanced results and interests.

1993 – 1996

Received four annual awards for *best student among peers* during the studies at the University “Cyril and Methodius” in Republic of Macedonia.

European University, Faculty of Informatics, Skopje, Macedonia

Assistant Professor and Head of research

July 2009 – current

Research coordination, development of lectures, presentation of lectures,
setting assignments and exams and course coordination at undergraduate and masters level courses.

PhD supervision

September 2008 – current

PhD thesis supervisor (adviser):

Zoran Zdravev (with Margita Kon-Popovska, University St. Cyril and Methodious) –

Creating a localized repository of standardized learning objects in terms of interoperability

(*completed* July 2011)

MSc supervision

September 2009 – current

MSc thesis supervisor (adviser):

Vladimir Nasteski – Building a Macedonian test collection for information retrieval

(*completed* February 2011)

Ljupco Krstevski – Flexible and adaptive e-learning in higher education

(*completed* February 2011)

Vesna Gega – Using XML elements for effective focused information retrieval

(*completed* May 2011)

Ilija Kumbaroski – Using passages for effective focused information retrieval

(*completed* May 2011)

Jasmina Armenska (with Katerina Zdravkova, University St. Cyril and Methodious) –

Using information retrieval methods to answer questions in Macedonian

(*completed* July 2011)

Igor Altanovski – Digital Natives and their impact on Macedonian higher education

(*in progress*)

Rijat Abdullahi – Building a test collection for Albanian information retrieval

(*in progress*)

Suzana Ademi – Business intelligence data analysis: Effects and competitive advantages

for companies in Macedonia (*in progress*)

Majlinda Axhiu – Sentiment analysis and how companies could use it to improve businesses

(*in progress*)

Vladimir Mitevski – Evaluating in-context tasks in focused retrieval (*in progress*)

Biljana Kumpanijoska – Teaching programming through animation and games (*in progress*)

Paper Reviews

September 2003 – current

Reviewed papers for the following journals and conferences:

ACM Transactions on Information Systems (ACM TOIS)

Springer Information Retrieval (Springer IR)

Springer Knowledge and Information Systems (Springer KAIS)

Elsevier Artificial Intelligence (Elsevier AI)

ACM International Conference on R&D in Information Retrieval (ACM SIGIR)

ACM International Conference on Information & Knowledge Management (ACM CIKM)

International Conference on Flexible Query Answering Systems (FQAS)

Australasian Database Conference (ADC)

International Conference on Database and Expert Systems Applications (DEXA)

International Conference on IT in Asia (CITA)

IADIS International Conference on Information Systems (IS)

MIT Faculty of Computer Science and Technology, Skopje, Macedonia

Assistant Professor and Dean of faculty

December 2007 – July 2009

Staff coordination and syllabus management, development of lectures, presentation of lectures, setting assignments and exams and course coordination at undergraduate and masters level courses.

AxIS project team, INRIA Rocquencourt, France

Post-Doctoral Research Scientist

December 2006 – December 2007

Research and development of effective database and information retrieval techniques in the fields of XML Document Mining and XML Entity Ranking.

RMIT University, Melbourne, Australia

Sessional Lecturer and Tutor

April 2003 – November 2006

Development of lectures, presentation of lectures, setting and marking assignments and exams, and course coordination at undergraduate and masters level courses.

Research Assistant

24 November 2005 – 23 December 2005

Collecting and organizing existing research work to assist in preparation for a grant proposal.

RMIT University, Melbourne, Australia

- Document Markup Languages (including XML and native XML databases, 4 semesters)
- Web Servers and Web Technologies (including the Apache web server, 3 semesters)
- Web Database Applications (including PHP, MySQL database and SQL, 2 semesters)
- Internet and Intranet Document Engineering (2 semesters)
- Introduction to Database Systems (including Oracle database and SQL, 1 semester)
- Multimedia Information Retrieval (1 semester)
- Introduction to Information Technology (1 semester)
- Secure Electronic Commerce (1 semester)
- Computer and Internet Forensics (1 semester)

MIT University, Skopje, Macedonia

- Programming 1 (including structural programming in C++, 1 semester)
- Programming 2 (including object-oriented programming in C++, 2 semesters)
- Computer organization and architecture (1 semester)
- Database systems (including MySQL database and SQL, 1 semester)
- Web page construction (including (X)HTML, JavaScript and PHP, 1 semester)
- Web design and programming (including PHP, MySQL database and SQL, 1 semester)
- XML family of technologies (including XML, DTD/Schema, XSLT, DOM, SAX, XQuery and native XML databases, 1 semester)
- Web servers and web technologies (including the Apache web server, 1 semester)

SEEU University, Skopje, Macedonia

- Service-Oriented Architectures (including XML, SOAP, WSDL and UDDI, 3 semesters)
- Object-Oriented Software Engineering (2 semesters)
- Database Management Systems (including MySQL database and SQL, 2 semesters)
- Web programming (including PHP, MySQL database and SQL, 1 semester)
- XML and Databases (including XML, DTD/Schema, XSLT, DOM, SAX, XQuery and native XML databases, 1 semester)
- Business Modelling & Process Innovation (1 semester)

University Goce Delchev, Stip, Macedonia

- Internet Programming (including PHP, MySQL database and SQL, 2 semesters)
- Information retrieval, search engines and web navigation (2 semesters)

New York University (UK Staffordshire study programme), Skopje, Macedonia
Systems and database analysis (including Oracle/MySQL databases and SQL, 1 semester)
Web application programming (including PHP, MySQL database and SQL, 1 semester)
Web Services (including XML, SOAP, WSDL and UDDI, 1 semester)

European University, Skopje, Macedonia

Database systems (including MS SQL Server/MySQL databases and SQL, 3 semesters)
Advanced database systems (including Data Mining and Semantic Web, 3 semesters)
Web Servers and Web Technologies (including the Apache web server, 3 semesters)
Visual programming (including the .NET platform and PHP/MySQL, 2 semester)
Research Methods (4 semesters)

ACADEMIC ACTIVITIES

Professional member of ACM and IEEE since 2003

Member of BCS IRSG since 2006

Member of MASIT (Macedonian IT chamber of commerce) Experts Council

Member of Programme Committee

Database and Expert Systems Applications (DEXA), 2010, 2011, 2012.

IADIS International Conference Information Systems (IS), 2009, 2010, 2011.

International Conference on IT in Asia (CITA), 2009, 2010, 2011.

Initiative for the Evaluation of XML Retrieval (INEX), 2008, 2009, 2010, 2011.

SIGIR 2006 Workshop on XML Element Retrieval Methodology, 2006.

Organiser

MIT General Reading club (MIGER) series of research seminars at MIT Faculty of CST

AxIS General Reading club (AGER) series of research seminars at INRIA Rocquencourt

Co-organiser

INEX 2007 Working Group on Effectiveness measures

Contributing author

Springer's Encyclopedia of Database Systems

PROFESSIONAL EXPERIENCE

01/01/2010 – current

Consultant/Advisor on IT trends and emerging technologies

1. **ARTISOFT, Skopje, Republic of Macedonia** (*Member of the Management Board*)
2. **ZEGIN Pharmaceuticals, Skopje, Republic of Macedonia** (*Consultant/Advisor*)
3. **Macedonian Business Systems, Skopje, Republic of Macedonia** (*Consultant/Advisor*)

01/01/2008 – current

Chief Science and Knowledge officer (CSO/CKO)

1. ITEA Solutions, Skopje, Republic of Macedonia

Research and development of popular Macedonian web applications, such as the search portal Nabu (www.nabu.mk) and the news aggregator Daily.mk (www.daily.mk).

01/04/1998 – 01/08/2002

System Engineer for supporting computer systems and networks

1. Macedonian Business Systems (MBS), Skopje, Republic of Macedonia

2. Ministry of Defense of Republic of Macedonia, Skopje, Republic of Macedonia

Designing and implementing Linux-based proxy and firewall systems for enterprises; administering UNIX/WindowsNT-based servers and networks.

01/09/1996 – 01/04/1998

Application Development and Maintenance

1. MAKSYSTEM, Skopje, Republic of Macedonia

Programming application modules in BBX and Borland Delphi on Oracle database.

PROFESSIONAL AREA OF EXPERTISE (1996 - 2006)

Database security and administration, Unix/Windows system security and administration, designing and implementing firewall, proxy and antiviral solutions for corporate networks.

COMPUTER SKILLS

Programming and scripting languages:

C++, Java, .Net
PHP, JavaScript
UNIX shell scripting, Awk, Sed
SQL, PL/SQL, XQuery
XML, HTML

Version Control Tools:

Basic familiarity with RCS, CVS and SVN

Operating systems and databases:

Unix/Linux, Windows
Oracle, MySQL, Microsoft Access

Groupware and other packages:

Lotus Domino/Notes, Oracle InterOffice
Microsoft Visual Studio, Borland Delphi

MANAGEMENT AND LEADERSHIP SKILLS

Participated in several projects involving teamwork and management skills. Projects varied from developing program units with popular program languages (such as Microsoft Visual Studio and Borland Delphi), developing and deploying database solutions in the enterprise (such as Oracle and MySQL), to coordinating research projects and student and teaching staff activities.

LANGUAGE SKILLS

Macedonian (native)
English, Serbian, Croatian (advanced)
Bulgarian (intermediate)

INTERESTS AND ACTIVITIES

Continual access to information media concerning CS & IT;
Research on topics of personal interest;
General team sports (soccer, basketball, tennis);
Communication, movies, music, reading, traveling.

REFERENCES

Dr. James Thom

Associate Professor
School of CS and IT, RMIT University
GPO Box 2476V, Melbourne 3001, Australia.
Phone: +61 3 9925 2992
E-mail: james.thom@rmit.edu.au
Web: <http://www.cs.rmit.edu.au/~jat>

Dr. Anne-Marie Vercoustre

Research Director (Retired)
INRIA Rocquencourt
Domaine de Voluceau
B.P.105 78153 Le Chesnay, France.
E-mail: Anne-Marie.Vercoustre@inria.fr
Web: <http://www-rocq.inria.fr/~vercoust>

Dr. Toni Stojanovski

Associate Professor
Former Dean of faculty
Faculty of Informatics,
European University
Kliment Ohridski Blvd 68,
1000 Skopje, Republic of Macedonia
Phone: +389 2 3202 159
E-mail: toni.stojanovski@eurm.edu.mk
Web: <http://www.eurm.edu.mk>

Dr. Vladimir Radevski

Associate Professor
Former Dean of faculty
Faculty of Computer Science and IT,
New York University
1066 Saraj, Skopje, Macedonia
Phone: +389 2 2034632
E-mail: v.radevski@seeu.edu.mk
Web: <http://www.seeu.edu.mk/en/~v.radevski>

Book

J. Pehcevski. "XML Information Retrieval: Approaches, Relevance and Evaluation", VDM Verlag Dr. Müller, 2010.

PhD thesis

J. Pehcevski. "Evaluation of Effective XML Information Retrieval", RMIT University, Melbourne, Australia, 2006.

Journal papers

1. J. Pehcevski, J. A. Thom, A-M. Vercoustre, and V. Naumovski. "Entity ranking in Wikipedia: Utilising categories, links and topic difficulty prediction", *Information Retrieval*, 13(5):568-600, 2010.
2. B. Fetaji, M. Fetaji, B. Cico and J. Pehcevski. "Software Engineering JAVA Educational Software by Combining Integrated Development Environment (IDE) and Virtual Learning Environment (VLE)", *Albanian Journal of Natural and Technical Sciences*, 2010.
3. J. Pehcevski, J. A. Thom, and A-M. Vercoustre. "Hybrid XML Retrieval: Combining Information Retrieval and a Native XML Database", *Information Retrieval*, 8(4):571-600, 2005.

Invited papers

These entries are published in the Encyclopedia of Database Systems by Springer. The Encyclopedia, under the editorial guidance of Ling Liu and M. Tamer Özsu, is a multiple volume, comprehensive, and authoritative reference on databases, data management, and database systems. Since it is available in both print and online formats, researchers, students, and practitioners will benefit from advanced search functionality and convenient interlinking possibilities with related online content. The Encyclopedia's online version is accessible on the SpringerLink platform.

1. J. Pehcevski and B. Piwowarski. "Evaluation Metrics for Semi-Structured Text Retrieval", *Encyclopedia of Database Systems*, Editors-in-chief: Liu, Ling; Özsu, M. Tamer, Springer (print and online), 2009.
2. J. Pehcevski and B. Piwowarski. "Specificity", *Encyclopedia of Database Systems*, Editors-in-chief: Liu, Ling; Özsu, M. Tamer, Springer (print and online), 2009.
3. J. Pehcevski and B. Larsen. "Relevance", *Encyclopedia of Database Systems*, Editors-in-chief: Liu, Ling; Özsu, M. Tamer, Springer (print and online), 2009.

Refereed Conference papers

1. M. Saveski, I. Trajkovski and J. Pehcevski. "Classification of Macedonian News Articles", *Proceedings of CITYR 2011*. European University, Skopje, Macedonia, 2011.
2. J. Armenska, A. Tomovski, K. Zdravkova and J. Pehcevski. "Information Retrieval using a Macedonian Test Collection for Question Answering", *ICT Innovations 2010*. Springer Verlag, Heidelberg, 2010.
3. A-M. Vercoustre, J. Pehcevski, and V. Naumovski. "Topic Difficulty Prediction in Entity Ranking", *Advances in Focused Retrieval: 7th International Workshop of the Initiative for the Evaluation of XML Retrieval (INEX 2008)*, volume 5631 of *Lecture Notes in Computer Science*. Springer Verlag, Heidelberg, 2009.

4. I. Janevski, K. Takasmanov, and J. Pehcevski. "NABU: A Macedonian web search portal", *Innovations in Information Technology, 2008 (IIT 2008)*, Al Ain, United Arab Emirates, 2008.
5. J. Kamps, J. Pehcevski, G. Kazai, M. Lalmas, and S. Robertson. "INEX 2007 Evaluation Measures", *Focused access to XML documents: 6th International Workshop of the Initiative for the Evaluation of XML Retrieval (INEX 2007)*, volume 4862 of *Lecture Notes in Computer Science*. Springer Verlag, Heidelberg, 2008.
6. A-M. Vercoustre, J. Pehcevski, and J. A. Thom. "Using Wikipedia Categories and Links in Entity Ranking", *Focused access to XML documents: 6th International Workshop of the Initiative for the Evaluation of XML Retrieval (INEX 2007)*, volume 4862 of *Lecture Notes in Computer Science*. Springer Verlag, Heidelberg, 2008.
7. J. Pehcevski, A-M. Vercoustre, and J. A. Thom. "Exploiting Locality of Wikipedia Links in Entity ranking", *Thirtieth European Conference on Information Retrieval (ECIR 2008)*. Glasgow, Scotland, March 30 - April 3, 2008.
8. A-M. Vercoustre, J. A. Thom, and J. Pehcevski. "Entity Ranking in Wikipedia", *ACM Symposium on Applied Computing (SAC 2008)*. Fortaleza, Ceara, Brazil, March 16 - 20, 2008.
9. J. A. Thom, J. Pehcevski, and A-M. Vercoustre. "Use of Wikipedia Categories in Entity Ranking", *Twelfth Australasian Document Computing Symposium (ADCS 2007)*. Melbourne, Australia, December 10, 2007.
10. J. Pehcevski and J. A. Thom. "Evaluating Focused Retrieval Tasks", *SIGIR 2007 Workshop on Focused Retrieval*. Amsterdam, The Netherlands, July 27, 2007.
11. J. Kamps, M. Lalmas, and J. Pehcevski. "Evaluating Relevant in Context: Document Retrieval with a Twist", *ACM SIGIR 2007 Conference on Research and Development in Information Retrieval*. Amsterdam, The Netherlands, July 23 - 27, 2007.
12. M. Lalmas, G. Kazai, J. Kamps, J. Pehcevski, B. Piwowarski, and S. Robertson. "INEX 2006 Evaluation Measures", *Comparative Evaluation of XML Information Retrieval Systems: Fifth Workshop of the Initiative for the Evaluation of XML Retrieval (INEX 2006)*. Lecture Notes in Computer Science, Vol 4518, Springer-Verlag, 2007.
13. D.N.F. Awang Iskandar, J. Pehcevski, J. A. Thom, and S. M. M. Tahaghoghi. "Social Media Retrieval using Image Features and Structured Text", *Comparative Evaluation of XML Information Retrieval Systems: Fifth Workshop of the Initiative for the Evaluation of XML Retrieval (INEX 2006)*. Lecture Notes in Computer Science, Vol 4518, Springer-Verlag, 2007.
14. J. Pehcevski. "Relevance in XML Retrieval: The User Perspective", *SIGIR 2006 Workshop on XML Element Retrieval Methodology*. Seattle, Washington, USA, August 10, 2006.
15. J. Pehcevski and J. A. Thom. "HiXEval: Highlighting XML Retrieval Evaluation", *Advances in XML Information Retrieval and Evaluation: Fourth Workshop of the Initiative for the Evaluation of XML Retrieval (INEX 2005), Dagstuhl 28-30 November 2005*. Lecture Notes in Computer Science, Vol 3977, Springer-Verlag, January 2006.
16. J. Pehcevski, J. A. Thom, and S. M. M. Tahaghoghi. "RMIT University at INEX 2005: Ad hoc Track", *Advances in XML Information Retrieval and Evaluation: Fourth Workshop of the Initiative for the Evaluation of XML Retrieval (INEX 2005), Dagstuhl 28-30 November 2005*. Lecture Notes in Computer Science, Vol 3977, Springer-Verlag, January 2006.
17. D.N.F. Awang Iskandar, J. Pehcevski, J. A. Thom, and S. M. M. Tahaghoghi. "Combining Image and Structured Text Retrieval", *Advances in XML Information Retrieval and Evaluation: Fourth Workshop of the Initiative for the Evaluation of XML Retrieval (INEX 2005), Dagstuhl 28-30 November 2005*. Lecture Notes in Computer Science, Vol 3977, Springer-Verlag, January 2006.
18. J. Pehcevski, J. A. Thom, S. M. M. Tahaghoghi, and A-M. Vercoustre, "Hybrid XML Retrieval Revisited", *Advances in XML Information Retrieval: Third International Workshop of the Initiative for the Evaluation of XML Retrieval, INEX 2004, Dagstuhl Castle, Germany, December 6-8, 2004, Revised Selected Papers*. Lecture Notes in Computer Science, Vol 3493, Springer-Verlag, May 2005.
19. J. Pehcevski, J. A. Thom, and A-M. Vercoustre, "Users and Assessors in the Context of INEX: Are Relevance Dimensions Relevant?" *Proceedings of the INEX 2005 Workshop on Element Retrieval Methodology University of Glasgow, UK, 30 July 2005*. University of Otago, New Zealand, 2005.

20. J. Pehcevski, J. A. Thom, and A-M. Vercoustre, "Enhancing Content-And-Structure Information Retrieval using a Native XML Database", *Proceedings of The First Twente Data Management Workshop (TDM'04) on XML Databases and Information Retrieval, University of Twente, Enschede, The Netherlands, June 2004*. CTIT - University of Twente, The Netherlands, 2004.
21. J. Pehcevski, J. A. Thom, and A-M. Vercoustre, "XML-Search Query Language: Needs and Requirements", *Proceedings of AUSWeb 2003 conference, Gold Coast, Australia, July 2003*. Southern Cross University, Australia, 2003.

Non-refereed Conference/Workshop papers

1. L. Krstevski, I. Atanasova and J. Pehcevski. "A Framework for Effective and Adaptive E-Learning", *Proceedings of the 7th International Conference for Informatics and Information Technology (CIIT 2010)*. Bitola, Macedonia, February 24-27, 2010.
2. S. Toleska, G. Josifovska, V. Drakulovski and J. Pehcevski. "Online Real-Estate Agency in Macedonia: Needs and Requirements", *Proceedings of the 7th International Conference for Informatics and Information Technology (CIIT 2010)*. Bitola, Macedonia, February 24-27, 2010.
3. J. A. Thom and J. Pehcevski. "How well does Best in Context reflect Ad Hoc XML retrieval?", *INEX 2007 Workshop Pre-Proceedings*. Dagstuhl, Germany, December 17 - 19, 2007.
4. J. Pehcevski, J. A. Thom and A-M. Vercoustre, "RMIT INEX Experiments: XML Retrieval using Lucy/eXist", *INEX 2003 Workshop Proceedings*. Dagstuhl, Germany, December 15 - 17, 2003.