

## Zhilin Wu

**Associate Research Professor,  
State Key Laboratory of Computer Science,  
Institute of Software, Chinese Academy of Sciences**

---

CONTACT INFORMATION	State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences, #4 South 4th Street, Zhongguancun, Haidian District, 100190, Beijing, China	<i>Tel:</i> +86 10 62661648 <i>Fax:</i> +86 10 62661648 <i>Email:</i> wuzl@ios.ac.cn <i>Homepage:</i> <a href="http://lcs.ios.ac.cn/~wuzl">http://lcs.ios.ac.cn/~wuzl</a>
BIRTH DATE & PLACE	I was born on August 2nd, 1980 in Cili County, Hunan Province, P.R.China.	
RESEARCH INTERESTS	Automata and Logic over infinite alphabets, Automatic verification and analysis of programs, Database theory.	
EDUCATION	2002-2007, <b>State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences</b> , Beijing, China Ph.D., Computer Software and Theory <ul style="list-style-type: none"><li>• Dissertation Title: “On the Theoretical Aspects of Temporal Logics: Expressive Power and Complexity”</li><li>• Advisor: Prof. Wenhui Zhang</li></ul> 1998-2002, <b>Central South University</b> , Changsha, Hunan Province, China B.S., Applied Mathematics and Software	
WORK EXPERIENCE	2012 Aug. - Present. <b>State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences</b> , Beijing, China Associate Researcher  2010 Aug. - 2012. Jul. <b>State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences</b> , Beijing, China Assistant Researcher  2009 Sep.- 2010 Jul. <b>LaBRI, Université Bordeaux 1</b> , Talence, France Postdoc, <ul style="list-style-type: none"><li>• Research topic: Workflow modelling and verification based on active XML documents</li><li>• Supervisor: Prof. Anca Muscholl</li></ul> 2007 Aug.-2009 Aug., <b>Sino-French Laboratory for Computer Science, Automation and Applied Mathematics</b> , Beijing, China Postdoc, <ul style="list-style-type: none"><li>• Research topic: Distributed computation of logical formulas</li><li>• Supervisor: Prof. Stéphane Grumbach</li></ul> 2003 Mar.-Jun., <b>Graduate School of Chinese Academy of Sciences</b> , Beijing, China <i>Teacher Assistant:</i> Homework reviews, course project supervision, and examination grading of the course “System Design and analysis Method”  2002 Jul.-Aug., <b>Uesoft Corporation</b> , Changsha, Hunan Province, China	

*Internship*: Use C++ to develop a Pipeline Stress Analysis software (AutoPSA)

JOURNAL  
PUBLICATIONS

Olivier Ly, Zhilin Wu, *On effective construction of the greatest solution of language inequality  $XA \subseteq BX$* , Theoretical Computer Science, Vol. 528, 12-31, 2014.

Zhilin Wu, Stéphane Grumbach, *Feasibility of motion planning on acyclic and strongly-connected directed graphs*, Discrete Applied Mathematics, 158(9), 1017-1028, 2010.

Zhilin Wu, *A note on the characterization of  $TL[EF]$* , Information processing letters, 102, 48-54, 2007.

Zhilin Wu, Wenhui Zhang, *The complexity of dual models problem of propositional linear temporal logics*, Journal of Software (*Ruan Jian Xue Bao*), 18(7), 1573-1581, 2007.

Zhilin Wu, *Quasi-star-free Languages on Infinite Words*, Acta Cybernetica, 17(1), 75-93, 2005.

CONFERENCE  
PUBLICATIONS

Serge Arbibetoul, Pierre Bourhis, Anca Muscholl, Zhilin Wu, *Recursive queries on trees and data trees*, 16th International Conference on Database Theory (ICDT), 93-104, 2013.

Zhilin Wu, *Commutative data automata*, the 21st EACSL Annual Conferences on Computer Science Logic (CSL), Leibniz International Proceedings in Informatics (LIPIcs), volume 16, 528-543, 2012.

Zhilin Wu, *A decidable extension of data automata*, the 2nd International Symposium on Games, Automata, Logics and Formal Verification (GANDLF), EPTCS 54, 116-130, 2011.

Blaise Genest and Anca Muscholl and Zhilin Wu, *Verifying Recursive Active Documents with Positive Data Tree Rewriting*, FSTTCS 2010, IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science, 469-480, 2010.

Stéphane Grumbach, Zhilin Wu, *Distributed tree decomposition of graphs and applications to verification*, APDCM 2010, the 12th Workshop on Advances in Parallel and Distributed Computational Models, 2010.

Stéphane Grumbach, Zhilin Wu, *Logical locality entails frugal distributed computation over graphs*, WG 2009, the 35th International Workshop on Graph-Theoretic Concepts in Computer Science, LNCS 5911, 154-165, 2010.

Zhilin Wu, Stéphane Grumbach, *Feasibility of motion planning on directed graphs*, TAMC 2009, the 6th Annual Conference on Theory and Applications of Models of Computation, LNCS 5532, 430-439, 2009.

Stéphane Grumbach, Fang Wang, Zhilin Wu, *On the distributed evaluation of recursive queries over graphs*, NOTERE 2009, the 9th Annual International Conference on New Technologies of Distributed Systems, 2009.

Zhilin Wu, *On the expressive power of  $QLTL$* , ICTAC 2007, the 4th International Colloquium on Theoretical Aspects of Computing, LNCS 4711, 467-481, 2007.

MANUSCRIPT

Zhilin Wu, *Regular path queries on graphs with data: A rigid approach*, 2014.

Linqing Tang, Mingji Xia, Zhilin Wu, *Quantitative reasoning of opinions in social networks*, 2012.

Jakub Michaliszyn, Anca Muscholl, Slawek Staworko, Piotr Wieczorek, Zhilin Wu, *On injective*

*embeddings of tree patterns*, 2012.

RESEARCH PROJECTS	<p>NSFC Grant, “<i>Symbolic models and implicate state model checking techniques</i>”, Participant, 2013-2016.</p> <p>NSFC Grant, “<i>Formal models over infinite alphabets: Logic and automata</i>”, Principle investigator, 2012-2014.</p>
COMMITTEES	<p>Member of the Programme Committee, <i>the 5th Symposium on Games, Automata, Logic, and Formal Languages (GandALF)</i>, 2014, Verona (Italy).</p> <p>Member of the Programme Committee, <i>the 4th Symposium on Games, Automata, Logic, and Formal Languages (GandALF)</i>, 2013, Borca di Cadore, Dolomites (Italy).</p>
TEACHING	<p>2012 Sep. - 2013 May. Graduate Course, <i>Automata theory and its applications</i>.</p>
COMPUTER SKILLS	<ul style="list-style-type: none"><li>• Languages: C, C++, Java</li><li>• Applications: L<sup>A</sup>T<sub>E</sub>X, common Windows database, and presentation software</li><li>• Operating Systems: Windows, Unix/Linux, MacOS</li></ul>
LANGUAGE SKILLS	<ul style="list-style-type: none"><li>• Mother Tongue: Chinese</li><li>• Fluent in written and oral English, IELTS Score 7</li><li>• Preliminary French</li></ul>
SERVICE	<ul style="list-style-type: none"><li>• A member of the executive committee of CCF-YOCSEF-GS (Chinese Computer Federation Young Computer Scientists&amp;Engineers Forum for Graduate Students), 2005-2006</li><li>• A member of Graduate Student Union of Institute of Software, Chinese Academy of Sciences, 2004-2005</li></ul>
HONORS AND AWARDS	<ul style="list-style-type: none"><li>• Graduate Student Scholarship of Chinese Academy of Sciences, 2004</li><li>• COMAP ICM (U.S.A. Interdisciplinary Contest in Modeling), Meritorious, 2002</li><li>• BAOGANG Education Award for Excellent Students (a national award for excellent students), 2001</li><li>• COMAP MCM (U.S.A. Mathematical Contest in Modeling), Meritorious, 2001</li><li>• CUMCM (China Undergraduate Mathematical Contest in Modeling), Second Class Award, 2000</li><li>• CHEN XINMIN Award for Excellent Students, Central South University, 2000</li></ul>