

XIAOJU DONG(董笑菊)

Curriculum vitae

12/10/2008

CONTACTS

- **Tel:** 00 86 21 34205060
- **Fax:** 00 86 21 34204728
- **E-mail:** dong-xj@cs.sjtu.edu.cn, xjdong@sjtu.edu.cn
- **Physical Address**
Room 519, No.3 SEIEE Buildings
Shanghai Jiao Tong University
800 Dongchuan Road, Shanghai
- **Postal Address**
Department of Computer Science and Engineering
Shanghai Jiao Tong University
800 Dongchuan Road, Shanghai 200240, China

PERSONAL

Sex: Female

Nationality: Chinese

Marital status: Married with a daughter

Place of birth: Gongzhuling, Jilin, China

LANGUAGE SKILLS

Chinese: native --- English: fluent --- French: beginner 😊

RESEARCH INTERESTS

- Concurrency Theory, in particular process calculi and Petri nets
- Membrane computing
- Systems biology, especially formal models for biological systems

EDUCATION

- 04/2000 - 04/2004 Ph.D. in Computer Science
[Shanghai Jiao Tong University](#), China
Supervisor: Professor [Yuxi FU](#)
- 09/1997 – 03/2000 M.S. in Computer Science
[Harbin Engineering University](#), China
Supervisor: Professor Guochang Gu
- 09/1993 – 07/1997 B.S. in Computer Science
Harbin Engineering University, China

ACADEMIC POSITIONS

- 12/2007 – present Associate Professor
[Department of Computer Science](#), Shanghai Jiao Tong University
- 04/2004 – 11/2007 Lecturer
Department of Computer Science, Shanghai Jiao Tong University

TEACHING EXPERIENCE

- 09/2008 – present Advisor of graduate students
[Zhenhua Dong](#)
- 03/2008 – 07/2008 Discrete Mathematics (for undergraduates)
School of Electronic, Information and Electrical Engineering
Shanghai Jiao Tong University
- 09/2007 – 01/2008 Discrete Mathematics (for undergraduates)
School of Electronic, Information and Electrical Engineering
Shanghai Jiao Tong University

RESEARCH EXPERIENCE

- 07/2008 – present Visiting Scholar, [Laboratoire PPS](#), [Université Paris Diderot - Paris 7](#), **Petri nets**, sponsored by *China Scholarship Committee*
 - Supervisor: [Pierre-Louis CURIEN](#) and [Daniele VARACCA](#)
- 01/2006 – 12/2008 Co-researcher, **Investigation on the Fairness and Anonymity of Ambient Calculus**, sponsored by *National Natural Science Foundation of China*

- Studying the properties of the fair ambient calculi
- Investigating the properties of the anonymous ambient calculi
- 01/2006 – 12/2007 **Formally Modeling Biological Computing using Process Calculi**, sponsored by *Shanghai Jiao Tong University*
- 01/2004 – 12/2007, Co-researcher, **Formally Modeling electronic commerce protocol using Process Calculi**, sponsored by *National Natural Science Foundation of China*
- 12/2003 – 07/2007 Co-researcher, **The Basic Theory for a DNA-computer and the Technique for its Design**, sponsored by *Science and Technology Commission of Shanghai Municipality*
- 2004 – 2007, Co-researcher, **Formally Modeling Biological Processes using Process Calculi**, sponsored by *the Research Fund for the Doctoral Program of Higher Education*
 - Modeling the phagocytosis with Brance calculus, BioAmbient calculus, Kappa calculus
 - Developing the simulator of the Spi calculus to predict the behaviors of biological processes
 - Applying P systems to model biological systems or pathways
- 01/2002 – 12/2004 Co-researcher, **The Theory of the Bisimulation Lattice in the Chi Calculus for Concurrent Computing**, sponsored by *the Research Fund for the Doctoral Program of Higher Education*
- 04/2000 – 04/2004 *Doctoral Research*. **Axiomatization Systems of the Asymmetric Chi Calculus with Mismatch**. Department of Computer Science, Shanghai Jiao Tong University (Supervisor: Prof. Yuxi Fu)
 - Defined the syntax and the semantics of the asymmetric chi calculus with mismatch
 - Proved the bisimulation lattice of the asymmetric chi calculus with mismatch
 - Studied the operational properties and algebraic properties of the barbed bisimilarity
 - Investigated the properties and axiomatic systems of other L-bisimilarities
- 09/1997 – 03/2000 *Master's Research*. **Research on Global Path Planning for Autonomous Underwater Vehicles in a Sea**

Environment, Department of Computer Science, Harbin Engineering University

- Designed a path-planning algorithm for automatic underwater vehicles, taking into consideration the ocean current
- Developed software to implement the algorithm

PUBLICATIONS

- **Xiaoju Dong. Axomatization Systems of the Asymmetric Chi Calculus with Mismatch.** Ph.D dissertation. Department of Computer Science, Shanghai Jiao Tong University, Shanghai, China. 2004. (in Chinese with English abstract)
- Chunyi Huang, **Xiaoju Dong. Maximally parallel attribute on P systems: properties and applications.** Pre-proceedings of *the International Conference Bio-Inspired Computing--Theory and Applications*, 2007. Also in *Progress in Natural Science*. 2008, 18(5): 629-632.
- Chunyi Huang, **Xiaoju Dong**, Huan Long. **Solving the sort problem using a P system.** *Journal of Shanghai Jiao Tong University*, 2008, 42(2): 206-208. (in Chinese with English abstract)
- Xian Xu, **Xiaoju Dong. Study on a new variant of tissue P systems.** *Science of Computer*, 2008. (in Chinese with English abstract)
- Min Zhang, Zhengwei Qi, **Xiaoju Dong. Executable Specification of P Systems with Active Membranes and Its Implementation.** *Journal of Shanghai Jiao Tong University*, 2008. (in Chinese with English abstract)
- Qing Zhuang, Xiaojuan Cai, **Xiaoju Dong**, Zhengwei Qi. **A Verification Tool for Security Protocol on GSPM.** *Computer Engineering*. 2008. (in Chinese with English abstract)
- **Xiaoju Dong**, Yuxi Fu. **Barbed Congruence of Asymmetry and Mismatch.** *Journal of Computer Science and Technology*, 22(4), 2007: 575-579.
- Xian Xu, **Xiaoju Dong** and Yuxi Fu. **A Model in kappa for DNA Addition.** Proceedings of *Workshop on Membrane Computing and Biologically Inspired Process Calculi*, July 9, 2006 (MeCBIC2006). Also in *Electronic Notes in Theoretical Computer Science*, 171(2), 2007: 209-222.

- Yang Pu, **Xiaoju Dong**. **Continuous simulation of biomolecular systems based on process calculus**. In Proc. of *International Symposium on Artificial Life and Robotics*, Oita, Japan, January 25-27, 2007.
- Dan Li, Min Zhang, **Xiaoju Dong**. **κ -Calculus Model for the Life-Cycle of Lambda Phage**. *Journal of Shanghai Jiao Tong University*. 2007: 42-22. (in Chinese with English abstract)
- **Xiaoju Dong** and Yuxi Fu. **Barbed Congruence of the Asymmetric Chi Calculus**. *Journal of Harbin Institute of Technology*, 13(4), 2006: 444-451.
- **Xiaoju Dong**, Jiahua Ni, Yuxi Fu. **Modeling the biological and chemical reactive processes using process calculi**. *The Annual Conference of Theoretical Computer Science of China*, 2006. (in Chinese)
- Yang Pu, **Xiaoju Dong**. **The simulation and analysis of the tile self-assemble**. *The Annual Conference of Theoretical Computer Science of China*, 2006. (in Chinese).
- Yang Pu, Yanbin Yu, **Xiaoju Dong**. **Simulation of biomolecular processes by using stochastic P systems**. In Proc. of *International Workshop on High Performance Computing in the Life Sciences (HPCLife)*, Ouro Preto, Brazil, 2006.
- Farong Zhong, Yuxi Fu, **Xiaoju Dong**. **Bisimulation Congruence for Asymmetric $\chi\neq$ -Calculus**. Proceedings-Fifth International Symposium on Parallel and Distributed Computing, 2006: 173-184.
- Yonggen Gu, Yuxi Fu, Yang Li, **Xiaoju Dong**. A Generic Model for Symbolic Analyzing Security Protocols. *CIT 2005*, IEEE, 2005: 680-684.
- **Xiaoju Dong**, Yuxi Fu, Xu Xian. **A Survey of Systems Biology Formal Models**. *The Annual Conference of Theoretical Computer Science of China*. 2005. (in Chinese)
- Zhupeng Dong, **Xiaoju Dong**, Xian Xu, Yuxi Fu, Zhizhou Zhang, Lin He. **An Implementation for Mapping SBML to BioSPI**. *FSKD(2), Lecture Notes in Computer Science*, LNAI 3614, 2005: 1128-1131.
- Zhupeng Dong, **Xiaoju Dong**, Jiahua Ni. **Research on Systems Biology Models Conversion**. *Journal of Shanghai Jiao Tong University*, 39(8), 2005: 1280–1283. (in Chinese with English Abstract)
- Yuxi Fu, **Xiaoju Dong**. **Formalizing the Environment View of Process Equivalence**. *The International Symposium on Computational and*

Information Sciences (CIS'04), Shanghai, December 16-18, *Lecture Notes in Computer Science 3314*, 2004: 336-345.

- **Xiaoju Dong**, Farong Zhong and Yuxi Fu. **Bisimulation Lattice of Asymmetric Chi Calculus with Mismatch**. *High Technology Letters*, 9(4), 2003: 50-55.
- **Xiaoju Dong** and Yuxi Fu. **Observing Asymmetry and Mismatch**. In A Ohori, *APLAS 2003, Lecture Notes in Computer Science 2895*, Springer-Verlag, Nov. 27-29, Beijing, China, 2003: 2-19.
- **Xiaoju Dong** and Guochang Gu. **AUV Global Path Planning Allowing for Ocean Current**. In Proceedings of the 3rd World Congress on Intelligent Control and Automation, IEEE Press, June28---July 2, Hefei, China, 2000, 2: 1230-1234.
- **Xiaoju Dong**, Jingyu Liu, Guochang Gu. **Implementation of Motion-viewing Simulation Based on OpenGL**. *Computer Engineering*, 1999, 25(12): 25-26.