

Curriculum Vitae

Xin Qi, Ph.D. Student (3rd year)

Department of Computer Science,
College of William and Mary, USA

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Research Interests

Ubiquitous Computing and Mobile Systems.

Education

College of William and Mary

Ph.D. Candidate, Computer Science (GPA 3.92/4.0)

Williamsburg VA, USA

August 2010 - August 2014 (expected)

- Advisor: Gang Zhou (Ph.D., University of Virginia)

- Ph.D. Committee: Virginia Torczon, Haining Wang, Gang Zhou

Institute of Automation, Chinese Academy of Sciences

M.Eng. in Pattern Recognition and Intelligent Systems

Beijing, China

2007 - 2010

Nanjing University

B.S., Computer Science (GPA Rank 13/170)

Nanjing, China

2003 - 2007

Professional Appointments

College of William and Mary

Research Assistant, Computer Science

Williamsburg VA, USA

2012 - present

College of William and Mary

Teaching Assistant, Computer Science

Williamsburg VA, USA

2010 - 2012

Institute of Automation, Chinese Academy of Sciences

Research Assistant, Pattern Recognition and Intelligent Systems

Beijing, China

2007 - 2010

Selected Publications ([full list](#))

[Paper] **Xin Qi**, Qing Yang, David T. Nguyen, Gang Zhou, “**Context-aware Frame Rate Adaption for Video Chats on Smartphones,**” In Adjunct Proceedings of the 2013 ACM International Joint Conference on Pervasive and Ubiquitous Computing, 4-page poster, Zurich, Switzerland, September 2013. (**Ubicomp’13**)

[Paper] **Xin Qi**, Matthew Keally, Gang Zhou, Yantao Li, Zhen Ren, “**AdaSense: Adapting Sampling Rates for Activity Recognition in Body Sensor Networks,**” In Proceedings of the 19th IEEE Real-Time and Embedded Technology and Applications Symposium, pages 162-173, Philadelphia, PA, April 2013. (**RTAS’13**)

[Paper] David T. Nguyen, Gang Zhou, **Xin Qi**, Tommy Nguyen, Ge Peng, Jianing Zhao, Duy Le, “**Storage-aware Smartphone Energy Savings,**” In Proceedings of the 2013 ACM International Joint Conference on Pervasive and Ubiquitous Computing, 10 pages, Zurich, Switzerland, September 2013. (**Ubicomp’13**)

[Paper] **Xin Qi**, Gang Zhou, Yantao Li, Ge Peng, “**RadioSense: Exploiting Wireless Communication Patterns for Body Sensor Network Activity Recognition,**” In Proceedings of the 33rd IEEE Real-Time Systems Symposium, pages 95-104, San Juan, Puerto Rico, December 2012. (**RTSS’12**)

- [Paper] Andrew Pyles, **Xin Qi**, Matthew Keally, Xue Liu, “**SAPSM: Smart Adaptive 802.11 PSM for Smartphones,**” In Proceedings of the 14th ACM International Conference on Ubiquitous Computing, pages 11-20, Pittsburg, PA, September 2012. (**UbiComp’12**)
- [Patent] David Nguyen, Gang Zhou, **Xin Qi**, “**Method of Conserving Power Based on Electronic Device’s I/O Pattern,**” United States Patent Application Serial No. 13/715,076, filed in December 2012. (**Patent Pending**)
- [Paper] Yantao Li, **Xin Qi**, Matthew Keally, Zhen Ren, Gang Zhou, Di Xiao, Shaojiang Deng, “**Communication Energy Modeling and Optimization through Joint Packet Size Analysis of BSN and WiFi Networks,**” IEEE Transactions on Parallel and Distributed Systems, (accepted by **TPDS** in 2012, to appear)
- [Demo] Michel Bauderon, Christophe Bobineau, Stephane Grumbach, Antoine Henry, **Xin Qi**, Wenwu Qu, Kun Suo, Fang Wang, Zhilin Wu, “**Netquest: An Abstract Model for Pervasive Applications,**” System Demo at the 7th International Conference on Pervasive Computing, May, 2009 (**Pervasive’09**) (Names are listed in alphabetical order. I led the demo paper.)

Expertise

Algorithms

Machine Learning: ANN, Decision Tree, PCA, SVM, Genetic programming

Basic Knowledge of Convex Optimization

Programming Skills

Programming: C/C++, Java, and Matlab

Programming tools: flex & bison

Machine Learning Software: weka, cvx, libsvm, and gplab

Basic Knowledge of Linux Kernel and Android Source Code

Professional Activities

Memberships: ACM, IEEE student member

Conference and Journal Reviewer: ACM UbiComp 2012, ACM BodyNets 2013, IEEE RTSS 2012, IEEE TPDS 2012, IEEE INFOCOM (2012,2013)

Conference Service:

- Student Volunteer for the 11th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2007), Nanjing, Jiangsu, China, May, 2007

Visiting and internship:

- Exchange Student at Grenoble INP (ENSIMAG), Joseph Fourier University, Grenoble, France, August 2009 ~ November 2009 (4 months)
- Intern at France Telecom, Beijing, China, May 2008 ~ August 2008 (4 months)

Talks

- Title: AdaSense: Adapting Sampling Rates for Activity Recognition in Body Sensor Networks
 - Presented at the 19th IEEE Real-Time and Embedded Technology and Applications Symposium (**RTAS**), Philadelphia, PA, on Apr. 10th, 2013.
- Title: RadioSense: Exploiting Wireless Communication Patterns for Body Sensor Network Activity Recognition
 - Presented at the 33rd IEEE Real-Time Systems Symposium (**RTSS**), San Juan, Puerto Rico, on Dec. 5th, 2012.
 - Presented for the Stephen K. Park Graduate Research Award Nomination at the Colloquium of Department of Computer Science, College of William and Mary, Williamsburg, VA, on Oct. 5th, 2012.
 - Invited talk at the class of Sensors & Ubiquitous Computing, Department of Computer Science, College of William and Mary, Williamsburg, VA, on Oct. 1st, 2012.
- Title: SAPSM: Smart Adaptive 802.11 PSM for Smartphones
 - Presented at the 14th International Conference on Ubiquitous Computing (**Ubicomp**), Pittsburgh, PA, on Sep. 5th, 2012.

Selected Scholarships, Honors and Awards

Scholarships:

- Arts & Science OGSR/Graduate Student Association Conference Funds, College of William and Mary, 2012 Travel grant, Department of Computer Science, College of William and Mary, 2012
- Bursary from EDBT Summer School on Data and Resource Management in Ambient Computing, 2009, Presquile de Giens, France, August 30th - September 4th, 2009
- DongShiDongFang Scholarship (1.7%), Nanjing University, 2005 and 2006

Honors and Awards:

- Nomination for the Stephen K. Park Graduate Research Award, College of William and Mary, 2012
- The Best Feature Prize for the Hackathon of ACM Student Chapter at College of William and Mary, 2012
- Chinese Undergraduate Mathematical Modeling Competition, the 1st Prize in Jiangsu Province, 2006
- Chinese Undergraduate Mathematical Modeling Competition, the 2nd Prize in Jiangsu Province, 2005
- Excellent Student in Nanjing University (5%) , 2005 and 2006
- Chinese High School Students Biology Knowledge Competition, Nationwide 2nd Prize, 2002

Teaching Experience

Department of Computer Science, College of William and Mary, Williamsburg, VA

- TA for CSCI 321: Database Systems (Undergraduate Level), Fall 2010
- TA for CSCI 503/303: Algorithms (Undergraduate Level), Spring 2011 and Fall 2011
- TA for CSCI 653: Analysis of Algorithms (Graduate Level), Spring 2012

References Available to Contact

Gang Zhou (gzhou@cs.wm.edu; +1-757-221-3458; URL: <http://www.cs.wm.edu/~gzhou/>)

- Associate Professor, Department of Computer Science, College of William and Mary, Williamsburg, VA 23187. Prof. Zhou is my graduate adviser.

Virginia Torczon (va@cs.wm.edu; +1-757-221-3460; URL: <http://www.cs.wm.edu/~va/>)

- Professor, former Chair of Department of Computer Science, College of William and Mary, Williamsburg, VA 23187. Prof. Torczon is in my Ph.D. committee.

Haining Wang (hnw@cs.wm.edu; +1-757-221-3457; URL: <http://www.cs.wm.edu/~hnw/>)

- Wilson and Martha Stephens Associate Professor, Department of Computer Science, College of William and Mary, Williamsburg, VA 23187. Prof. Wang is in my Ph.D. committee.