

JING XU

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EDUCATION

PhD in Computer Science, University of California, Riverside, 2010, GPA (3.91/4.0)
BS in Computer Science, with honors, Zhejiang University, China, 2004, GPA (3.53/4.0)

RESEARCH INTERESTS

Developing machine learning approaches to real-world problems

PUBLICATIONS

- Jing Xu** (2010). “**A Continuous Time Bayesian Network Approach for Intrusion Detection.**” *Doctoral Dissertation, University of California, Riverside.*
- Jing Xu** and Christian Shelton (2010). “**Intrusion Detection using Continuous Time Bayesian Networks.**” *Journal of Artificial Intelligence Research (JAIR)*, 39, 745-774.
- Yu Fan, **Jing Xu** and Christian R. Shelton (2010). “**Importance Sampling for Continuous Time Bayesian Networks.**” *Journal of Machine Learning Research (JMLR)*, 11(Aug), 2115-2140.
- Christian R. Shelton, Yu Fan, William Lam, Joon Lee and **Jing Xu** (2010). “**Continuous Time Bayesian Network Reasoning and Learning Engine.**” *Journal of Machine Learning Research (JMLR)*, 11(Mar) 1137-1140.
- Jing Xu** and Christian R. Shelton (2008). “**Continuous Time Bayesian Networks for Host Level Network Intrusion Detection.**” *Machine Learning and Knowledge Discovery in Databases (ECML/PKDD) (LNAI, vol 5212) (pp. 613-627).*
- John M. Agosta, Jaideep Chandrashekar, Frederic Giroire, Carl Livadas and **Jing Xu** (2007). “**Approaches to Anomaly Detection using Host Network-Traffic Traces.**” *Neural Information Processing Systems(NIPS) workshop on Machine Learning for Systems Problems (MLSys).*
- Jing Xu** and Christian R. Shelton (2006). “**Applying CTBNs on Host-level Network Anomaly Detection.**” *Workshop for Women in Machine Learning (WIML).*

PROFESSIONAL EXPERIENCES

Research Assistant Sep 2005 — Aug 2010
Riverside Lab for Artificial Intelligence Research University of California, Riverside
Advisor: Dr. Christian R. Shelton

- Developed several algorithms in continuous time Bayesian networks (CTBNs)
- Implemented Gibbs sampling algorithm in a CTBN reasoning and learning engine
- Developed a general approach for network intrusion detection

Research Intern Jun 2007 — Dec 2007
Distributed Detection and Inference Team Intel Research, CA
Host: John Mark Agosta

- Developed an end host intrusion detector for enterprise distributed systems
- Network feature modeling and profiling using probabilistic models

Research Assistant

State Street Technology Center
 Advisor: Dr. Jianling Sun

Mar 2004 — Jun 2004
 Zhejiang University, China

- Developed an intrusion detector on audit trails of database management systems using SVMs

Research Assistant

Aerospace and Aviation Technology Center
 Advisor: Dr. Jinxiang Dong

Jul 2002 — Mar 2004
 Zhejiang University, China

- Developed an email spam detector using concurrent statistics of keywords

Teaching Assistant

Department of Computer Science & Engineering
 - Introduction to computing

2009,2008,2006
 University of California, Riverside

PROFESSIONAL SERVICES

Reviewer for IEEE Consumer Communications and Networking Conference (CCNC) 2008

PROGRAMMING SKILLS

Familiar with Unix/Linux environmental programming
 Extensive experience with C/C++ programming
 Proficient with Perl, Matlab, MySQL and Shell programming

HONORS AND AWARDS

Google Workshop for Women Engineers student travel grant, 2009
 Workshop for Women in Machine Learning student travel grant, 2006
 Graduating with honor, Chu Kechen Honors College, Zhejiang University, China, 2004
 Award of outstanding undergraduate thesis, Zhejiang University, China, 2004
 Third prize of “Challenge Cup” National College Academic works of science and technology competition, Zhejiang Province, China, 2003
 Second Prize of “Challenge Cup” National College Academic works of science and technology competition, Zhejiang University, China, 2003
 Outstanding Freshmen Award, Zhejiang University, China, 2000

REFERENCES**Christian R. Shelton**

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 Department of CSE
 UC Riverside
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Ertem Tuncel

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 Department of EE
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 Intel Labs
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