

3-8 Achievements List

(April 2006 – March 2011)

International Standard			
TITLE	DATE	AUTHOR	RECOMMENDATION
Cybersecurity information exchange techniques	2010/12/15	Stephen Adegbite, Inette Furey, Youki Kadobayashi, Robert A. Martin, Damir Rajnovic, Gavin Reid, Anthony M. Rutkowski, Gregg Schudel, Takeshi Takahashi	Draft Recommendation ITU-T X.1500

Journal			
TITLE	DATE	AUTHOR	VENUE
Hands-on Environments for Network Technologies on StarBED	2011/2/1	Toshiyuki Miyachi, Shinsuke Miwa, Yoichi Shinoda	Japan Journal of Educational Technology, Vol. 34, No. 3 (to appear) (in Japanese)
Personalized mode transductive spanning SVM classification tree	2011/1/14	Shaoning Pang, Tao Ban, Youki Kadobayashi, Nicola Kasabov	Information Sciences, Elsevier (to appear)
HumanBoost: Utilization of Users' Past Trust Decision for Identifying Fraudulent Websites	2010/12/3	Daisuke Miyamoto, Hiroaki Hazeyama, Youki Kadobayashi	Journal of Intelligent Learning Systems and Applications, Scientific Research Publishing, Vol. 2, No. 4, pp. 190–199
Introduction to AdaIndex — an Adaptive Similarity Search Algorithm in General Metric Spaces	2009/12/1	Tao Ban, Youki Kadobayashi	Advances in Computer Science and IT, InTech, ISBN 978-953-7619-51-0, pp. 381–396
Measuring IDS-estimated attack impacts for rational incident response: a decision theoretic approach	2009/10/1	Zonghua Zhang, Pin-Han Ho, Liwen He	Computers & Security, Elsevier, Vol. 18, Iss. 7, pp. 605–614
A new approach to discover interlacing data structures in high-dimensional space	2009/8/24	Tao Ban, Shigeo Abe, Changshui Zhang	Journal of Intelligent Information Systems, Kluwer Academic Publishers, Vol. 33, Iss. 1, pp. 3–22
Cryptographically Secure Bloom-Filters	2009/8/1	Ryo Nojima, Youki Kadobayashi	Transactions on Data Privacy, IIIA-CSIC, Vol. 2, Iss. 2, pp. 131–139
Janus: A dual-purpose analytical model for understanding, characterizing and countering multi-stage collusive attacks in enterprise networks	2009/5/1	Zonghua Zhang, Pin-Han Ho	Journal of Network and Computer Applications, Elsevier, Vol. 32, No. 3, pp. 710–720
Semantic Security for the McEliece Cryptosystem without Random Oracles	2008/12/1	Ryo Nojima, Hideki Imai, Kazukuni Kobara, Kirill Morozov	Designs, Codes and Cryptography. Springer, Vol. 49, No. 1, pp. 289–305
On tighter inequalities for efficient similarity search in metric spaces	2008/8/21	Tao Ban, Youki Kadobayashi	IAENG International Journal of Computer Science, International Association of Engineering, Vol. 35, Iss. 3

TITLE	DATE	AUTHOR	VENUE
Incident-driven memory snapshot for full-virtualized OS using interruptive debugging techniques	2008/7/11	Ruo Ando, Youki Kadobayashi, Yoichi Shinoda	International Journal of Security and Its Applications (IJSIA), Science & Engineering Research Support Center, Vol. 2, No. 3, pp. 41–47

International Conference			
TITLE	DATE	AUTHOR	VENUE
Mining interlacing manifolds in high dimensional spaces	2011/3/22	Tao Ban, Changshui Zhang, Shigeo Abe, Youki Kadobayashi	The 25th Symposium on Applied Computing (SAC 2011)
Taxonomical Approach to the Deployment of Traceback Mechanisms	2011/2/17	Takeshi Takahashi, Hiroaki Hazeyama, Daisuke Miyamoto, Youki Kadobayashi	Baltic Conference on Future Internet Communications (IEEE BCFIC Riga 2011)
A fast kernel on hierarchical tree structures and its application to Windows application behavior analysis	2010/11/26	Tao Ban, Ruo Ando, Youki Kadobayashi	The 17th International Conference on Neural Information Processing (ICONIP 2010)
A Malware Detection Algorithm Based on Multi-view Fusion	2010/11/26	Shanqing Guo, Qixia Yuan, Fengbo Lin, Fengyu Wang, Tao Ban	The 17th International Conference on Neural Information Processing (ICONIP 2010)
Fast Implementation of String-kernel-based Support Vector Classifiers by GPU Computing	2010/11/22	Yongquan Shi, Tao Ban, Shanqing Guo, Qiuliang Xu, Youki Kadobayashi	The 17th International Conference on Neural Information Processing (ICONIP 2010)
Efficiency-Improved Fully Simulatable Adaptive OT under the DDH Assumption	2010/9/13	Kaoru Kurosawa, Ryo Nojima, Le Trieu Phong	The 7th Conference on Security and Cryptography for Networks (SCN 2010)
Ontological Approach toward Cybersecurity in Cloud Computing	2010/9/10	Takeshi Takahashi, Youki Kadobayashi, Hiroyuki Fujiwara	The 3rd International Conference on Security of Information and Networks (SIN 2010) (The Best Paper Award in Track)
Incremental and Decremental LDA Learning with Applications	2010/7/20	Shaoning Pang, Tao Ban, Youki Kadobayashi, Nicola Kasabov	IEEE International Joint Conference on Neural Network (IJCNN 2010)
Building Ontology of Cybersecurity Operational Information	2010/4/19	Takeshi Takahashi, Hiroyuki Fujiwara, Youki Kadobayashi	The 6th Annual Cyber Security and Information Intelligence Research Workshop (CSIIRW 2010)
Simple Adaptive Oblivious Transfer without Random Oracle	2009/12/9	Kaoru Kurosawa, Ryo Nojima	The 15th annual International Conference on the Theory and Application of Cryptology and Information Security (Asiacrypt 2009)
AdaIndex: an adaptive index structure for fast similarity search in metric spaces	2009/12/3	Tao Ban, Shanqing Guo, Quliang Xu, Youki Kadobayashi	The 16th International Conference on Neural Information Processing (ICONIP 2009)

TITLE	DATE	AUTHOR	VENUE
String kernel based SVM for internet security implementation	2009/12/3	Zbynek Michlovsky, Shaoning Pang, Tao Ban, Youki Kadobayashi, Nicola Kasabov	The 16th International Conference on Neural Information Processing (ICONIP 2009)
HumanBoost: Utilization of Users' Past Trust Decision for Identifying Fraudulent Websites	2009/12/3	Daisuke Miyamoto, Hiroaki Hazeyama, Youki Kadobayashi	The 16th International Conference on Neural Information Processing (ICONIP 2009)
Hierarchical Core Vector Machines for Network Intrusion Detection	2009/12/2	Ye Chen, Shaoning Pang, Tao Ban, Youki Kadobayashi, Nicola Kasabov	The 16th International Conference on Neural Information Processing (ICONIP 2009)
Spanning SVM tree for personalized transductive learning	2009/9/15	Shaoning Pang, Tao Ban, Youki Kadobayashi, Nicola Kasabov	The 19th International Conference on Artificial Neural Networks (ICANN 2009)
A provably secure two-party attribute-based key agreement protocol	2009/9/12	Hao Wang, Qiuliang Xu, Tao Ban	The 5th International Conference on Intelligent Information Hiding and Multimedia Signal Processing (IIH-MSP 2009)
Identity based authenticated key agreement for tree-based group	2009/9/12	Xiangfei Sun, Qiuliang Xu, Tao Ban	The 5th International Conference on Intelligent Information Hiding and Multimedia Signal Processing (IIH-MSP 2009)
Perfect forward secure two-party key agreement protocol with key escrow	2009/9/12	Mengbo Hou, Qiuliang Xu, Tao Ban	The 5th International Conference on Intelligent Information Hiding and Multimedia Signal Processing (IIH-MSP 2009)
A Storage Efficient Redactable Signature in the Standard Model	2009/9/7	Ryo Nojima, Jin Tamura, Youki Kadobayashi, Hiroaki Kikuchi	The 12th Information Security Conference (ISC 2009)
Toward an Evaluation Framework for Reputation Systems in Autonomic Computing Networks	2009/8/26	Zonghua Zhang, Youki Kadobayashi, Farid Nait-Abdesselam	The 4th International Conference on Communications and Networking in China (ChinaCom 2009)
Experiences in emulating 10K AS topology with massive VM multiplexing	2009/8/17	Shinsuke Miwa, Mio Suzuki, Hiroaki Hazeyama, Satoshi Uda, Toshiyuki Miyachi, Youki Kadobayashi, Yoichi Shinoda	The 1st ACM SIGCOMM Workshop on Virtualized Infrastructure Systems and Architectures (VISA 2009)
A Comparative Evaluation of Traceability in CJK Internet	2009/8/6	Daisuke Miyamoto, Hiroaki Hazeyama, Youki Kadobayashi	The 4th Joint Workshop on Information Security (JWIS 2009)
A visualization of anomaly memory behavior of full-virtualized Windows OS using virtual machine introspection	2009/7/15	Ruo Ando, Nguyen Anh Quynh, Kuniyasu Suzuki	International Conference on Information Security and Privacy (ISP 2009)

TITLE	DATE	AUTHOR	VENUE
Sparse kernel feature analysis by FastMap and its variants	2009/6/19	Tao Ban, Youki Kadobayashi, Shigeo Abe	International Joint Conference on Neural Networks (IJCNN 2009)
On Achieving Cost-Sensitive Anomaly Detection and Response in Mobile Ad Hoc Networks	2009/6/16	Zonghua Zhang, Pin-Han Ho, Farid Nait-Abdesselam	IEEE Conference on Communications (ICC 2009)
A lightweight implementation of trusted domain enforcement for secure embedded web server	2009/3/19	Ruo Ando	The 3rd International Workshop on Intelligent, Mobile and Internet Services in Ubiquitous Computing (IMIS 2009)
gSVMT: Aggregating SVMs over a Dynamic Grid Learned from Data	2008/12/25	Shaoning Pang, Tao Ban, Youki Kadobayashi, Nicola Kasabov	IEEE International Workshop on Data Mining and Artificial Intelligence (DMAI 2008)
Hardening botnet by a rational botmaster	2008/12/16	Zonghua Zhang, Ruo Ando, Youki Kadobayashi	The 4th International Conferences on Information Security and Cryptology (Inscrypt 2008)
An enhancement of trusted domain enforcement using VMM interruption mechanism	2008/12/14	Ruo Ando, Youki Kadobayashi, Yoichi Shinoda	IEEE International Symposium on Trusted Computing (TrustCom 2008)
Enhancing the Security of Bloom-Filters with blind Signatures	2008/12/7	Ryo Nojima, Jin Tamura, Youki Kadobayashi	International Symposium on Information Theory and Its Applications (ISITA 2008)
G-means: A Clustering Algorithm for Intrusion Detection	2008/11/26	Zhonghua Zhao, Shanqing Guo, Qiuliang Xu, Tao Ban	The 15th International Conference on Neural Information Processing (ICONIP 2008)
Anomaly Intrusion Detection for Evolving Data Stream Based on Semi-Supervised Learning	2008/11/26	Yan Yu, Shanqing Guo, Shaohua Lan, Tao Ban	The 15th International Conference on Neural Information Processing (ICONIP 2008)
Faster Parameter Detection of Polymorphic Viral Code Using Hot List Strategy	2008/11/26	Ruo Ando	The 15th International Conference on Neural Information Processing (ICONIP 2008)
Analyzing characteristics of PC cluster consolidated with IP-SAN using data-intensive applications	2008/11/16	Asuka Hara, Kikuko Kamisaka, Saneyasu Yamaguchi, Masato Oguchi	The 20th IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS 2008)
Overlay GHC: an Extension of Guarded Horn Clauses for Overlay Programming	2008/9/3	Kenji Saito	The 5th International Workshop on Mobile P2P Data Management, Security and Trust (MPDMST 2008)
Outfitting an Inter-AS Topology to a Network Emulation TestBed for Realistic Performance Tests of DDoS Countermeasures	2008/8/5	Hiroaki Hazeyama, Mio Suzuki, Shinsuke Miwa, Daisuke Miyamoto, Youki Kadobayashi	Workshop on Cyber Security Experimentation and Test (CSET 2008)
Synchronized P2P query traffic generation for tracing information leaks on virtualized L2 datalink	2008/7/11	Ruo Ando, Youki Kadobayashi, Yoichi Shinoda	The 3rd Joint Workshop on Information Security (JWIS 2008)

TITLE	DATE	AUTHOR	VENUE
Incident-driven memory snapshot for full-virtualized OS using interruptive debugging techniques	2008/4/24	Ruo Ando, Youki Kadobayashi, Yoichi Shinoda	The 2nd International Conference on Information Security and Assurance (ISA 2008)
New Distance Lower Bounds for Efficient Proximity Searching in Metric Spaces	2008/3/20	Tao Ban, Youki Kadobayashi	The 2008 IAENG International Conference on Data Mining and Applications (ICMDA 2008)
Asynchronous Pseudo Physical Memory Snapshot and Forensics on Paravirtualized VMM Using Split Kernel Module	2007/11/30	Ruo Ando, Youki Kadobayashi, Yoichi Shinoda	The 10th International Conference on Information Security and Cryptology (ICISC 2007)
Obfuscated dechiper routine analysis using theorem prover towards effective trusted computing	2007/11/23	Ruo Ando, Koichi Furukawa	The 10th International Conference on Convergence Information Technology (ICCIT 2007)
Using genetic algorithm to balance the D-Index algorithm for metric search	2007/11/14	Tao Ban	The 14th International Conference on Neural Information Processing (ICONIP 2007) (The Best Paper Award)
Design Issues of an Isolated Sandbox used to Analyze Malwares	2007/10/1	Shinsuke Miwa, Toshiyuki Miyachi, Masashi Eto, Masashi Yoshizumi, Yoichi Shinoda	The 2nd International Workshop on Security (IWSEC 2007)
New prune rules for similarity search	2007/8/29	Tao Ban, Youki Kadobayashi	The 11th IASTED International Conference on Artificial Intelligence and Soft Computing (ASC 2007)
Asynchronouns notification channel for exploitation-robust secure OS on virtual machine monitor	2007/8/7	Ruo Ando, Youki Kadobayashi, Yoichi Shinoda	The 2nd Joint Workshop on Information Security (JWIS 2007)
Design and Implementation of an Isolated Sandbox with Mimetic Internet used to Analyze Malwares	2007/8/6	Shinsuke Miwa, Toshiyuki Miyachi, Masashi Eto, Masashi Yoshizumi, Yoichi Shinoda	DETER Community Workshop on Cyber Security Experimentation and Test (CSET 2007)
Parallel analysis of polymorphic viral code using automated deduction system	2007/7/31	Ruo Ando	The 8th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing (SNPD 2007)
Semantic Security for the McEliece Cryptosystem without Random Oracles, Easily	2007/4/16	Ryo Nojima, Hideki Imai, Kazukuni Kobara, Kirill Morozov	International Workshop on Coding and Cryptography (WCC 2007)
Efficient Shared-Key Authentication Scheme from any Weak Pseudorandom Function	2006/12/12	Ryo Nojima, Kazukuni Kobara, Hideki Imai	The 7th International Conference on Cryptology in India (Indocrypt 2006)

TITLE	DATE	AUTHOR	VENUE
Improving VMM based IPS for real-time snapshot and nullification of buffer overflow exploitation	2006/9/21	Ruo Ando, Youki Kadobayashi	The 1st Joint Workshop on Information Security (JWIS 2006)

Book			
TITLE	DATE	AUTHOR	VENUE
A study on the inequalities for fast similarity search in metric spaces	2009/4/28	Tao Ban, Youki Kadobayashi	Trends in Communication Technologies and Engineering Science, Springer Netherlands, Vol. 33, Chap. 2

Miscellaneous			
TITLE	DATE	AUTHOR	VENUE
Special issue on Adaptive and Autonomous Learning Methods and Applications	2010/11/1	Tao Ban, Shaoning Pang, Pitoyo Hartono	Journal of Intelligent Learning Systems and Applications, Scientific Research Publishing
CYBEX — The Cybersecurity Information Exchange Framework (X.1500)	2010/10/8	Anthony Rutkowski, Youki Kadobayashi, Inette Furey, Damir Rajnovic, Robert Martin, Takeshi Takahashi, Craig Schultz, Gavin Reid, Gregg Schudel, Mike Hird, Stephen Adegbite	ACM Computer Communication Review (ACM CCR)
Thematic issue on 'Adaptive Soft Computing Techniques and Applications'	2009/12/1	Shaoning Pang, Tao Ban	Memetic Computing, Springer, Vol. 1, No. 4, pp. 239–240
A Survey of Distributed Storage and Parallel I/O Technique for Security Incident Analysis	2008/11/25	Kikuko Kamisaka	NICT Journal, NICT, Vol. 55, Nos. 2/3, pp. 73–78
Distributed Processing Language Overlay GHC and its Application Possibilities	2008/11/25	Kenji Saito	NICT Journal, NICT, Vol. 55, Nos. 2/3, pp. 61–71
A Holistic Perspective on Understanding and Breaking Botnets: Challenges and Countermeasures	2008/11/25	Zonghua Zhang, Youki Kadobayashi	NICT Journal, NICT, Vol. 55, Nos. 2/3, pp. 43–59
Monitoring and analysis of network traffic in P2P environment	2008/11/25	Tao Ban, Ruo Ando, Youki Kadobayashi	NICT Journal, NICT, Vol. 55, Nos. 2/3, pp. 33–41
A Load Balancing System for Mitigating DDoS Attacks using Live Migration of Virtual Machines	2008/11/25	Ruo Ando, Shinsuke Miwa, Youki Kadobayashi, Yoichi Shinoda	NICT Journal, NICT, Vol. 55, Nos. 2/3, pp. 27–32
Design and Implementation of an Isolated Sandbox used to Analyze Malware	2008/11/25	Shinsuke Miwa, Youki Kadobayashi, Yoichi Shinoda	NICT Journal, NICT, Vol. 55, Nos. 2/3, pp. 17–26
On the Construction of Fast Secure Set-Intersection Protocols	2008/11/25	Ryo Nojima	NICT Journal, NICT, Vol. 55, Nos. 2/3, pp. 9–15
Research and Development of Traceable Network	2008/11/25	Youki Kadobayashi	NICT Journal, NICT, Vol. 55, Nos. 2/3, pp. 3–7