

RESUME

A. General

Name **Yongdong Wu** 吴永东
Sex Male
Date of birth Jan. 21, 1970
Nationality China (Singapore PR)
Language Chinese & English

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Research Interest e-commerce, Digital Right Management, Information Security, Network, Multimedia



B. Education

Date	Place	Major	Degree
9/94-7/97	Institute of Automation, Chinese Academy of Sciences (CAS), Beijing.	Pattern Recognition & Intelligent Control	Ph.D.
9/91-4/94	Beijing University of Aeronautics and Astronautics (BUAA)	Flight Control & Dynamic Simulation	M.S.
9/87- 7/91	Dept of Automatic control, BUAA	Computer Science, Automatic Control	B.S.

C. Work experience

Date	Company Name	Position	Description
12/97-present	Institute for Infocomm Research, SG	Associate Lead Scientist	Project manager
9/95-11/97	Dept. of Automatic Control, BUAA	Assistant Prof.	
9/94-6/97	Institute of Automation, CAS	Researcher	
9/91 - 9/95	Dept. of Automatic Control, BUAA	Researcher	

E. Computer skill and knowledge

- Software
C/C++ Fortran Pascal HTML Java/Javascript CGI
Netbios TCP/IP
Motif GL(SGI) OpenGL Win32
TMS320C2xx MCS8098/51/48
- Hardware
MCS48 MCS51 MCS96 Interface Circuit

D. Honours

1. Tan Kah Kee Young Inventor Merit award 2005 (no Gold award winner)
2. Tan Kah Kee Young Inventor Silver award 2004 (no Gold award winner)
3. Silver award of Achievement of Sci. and Tech., Ministry of Aerospace of China . 1997
4. Silver award of Achievement of Sci. and Tech., Ministry of Aerospace of China . 1997
5. 3rd class Merit, Ministry of Aerospace of China. 1997
6. Bronze Award of 6th Undergraduate Physics Contest in Beijing. (No Gold winner), Physics Society of Beijing, 1989
7. Silver Award of the First Undergraduate Mathematics Contest in Beijing, Mathematics Society of Beijing, 1988



Tan Kah Kee silver award (2004)



3rd merit (1997)

F. International Activity

1. 2005 International Conference on Intelligent Computing (ICIC'05), PC member
2. ISO/IEC JTC 1/WG 1 meeting, Singapore delegate. 5 proposals are incorporated in ISO JPEG standard draft
 - ISO/IEC JTC 1/WG 1 N2809: Yongdong Wu, Di Ma, Robert Deng, ImTrust: Design and Implementation (revised)
 - ISO/IEC JTC 1/WG 1 N2810: Yongdong Wu, Robert Deng, A Method for JPEG 2000 Access Control
 - ISO/IEC JTC 1/WG 1 N3087: Yongdong Wu, Di Ma, Robert Deng , Progressive Access to JPEG 2000 codestream
 - ISO/IEC JTC 1/WG 1 N3181: Yongdong Wu, Di Ma, Robert Deng, Comments on JPSEC Working Draft 3.6
 - ISO/IEC JTC 1/WG 1 N3153 Yongdong Wu, Di Ma, Robert Deng Templates for JPSEC Services

G. Supervisor

- One PhD candidate
- One Master candidate

G. Patents

1. Robert Deng, and Yongdong Wu, Method and Apparatus for Digital Content Copy Protection, US Pat. 6,711,553, 23 Mar 2004
2. Yongdong Wu, Xiaofeng Wei, and Di Ma, Method and System for deterrence of unauthorised reuse of display content. WO 2004/019152
3. Yongdong Wu, Method and System for Managing Secret with Biometric Information (pending), Jul. 2000
4. Yongdong Wu, Robert Deng, and Feng Bao, Method and Apparatus for Remote Authentication Based on Exchanging of Signals Representing Biometrics Information (pending), 1999
5. Yongdong Wu, and Robert Deng, Method for Incremental Authentication of Documents, Dec. 2002
6. Changsheng Xu and Yongdong Wu, Method for Diagnostic Lossless Medical Image Authentication, Feb. 2003

H. Publications

1. Yongdong Wu and Robert H. Deng, Security of an Ill-posed Operator for Image Authentication, *IEEE Transactions on Circuits and Systems for Video Technology*, 15(1):161-163, Jan. 2005
2. Robert H. Deng, Di Ma, Weizhong Shao, Yongdong Wu, Scalable Trusted Online Dissemination of JPEG2000 Images, *ACM Multimedia Systems* (accepted)
3. Yongdong Wu, Robert H. Deng, Scalable Authentication of MPEG-4 Streams, *IEEE Trans. on Multimedia* (accepted)
4. Yongdong Wu, On the Security of an SVD-based Ownership Watermarking, *IEEE Trans. on Multimedia*, vol.7, no.4, Aug. 2005
5. Yongdong Wu, and Robert Deng, Content-aware Authentication of Motion JPEG2000 Stream in Lossy Networks, *IEEE Trans. on Consumer Electronics*, 49:(4)792-801, 2003
6. Yongdong Wu , Non-linear Collusion Attack on a BuyerAuthentication Watermarking, *IEEE Trans. on Multimedia* (accepted with minor revision)
7. Tieyan Li, Yongdong Wu, Huafei Zhu, SEA: Secure and Effecient Aggregation of Encrypted Data in WSNs, *IEEE WirelessCom*, Hawaii, USA, Jun. 2005
8. Yongdong Wu, HweeHwa Pang, Robert H. Deng, How Much You Watch, How Much You Pay, *SPIE Visual Communications and Image Processing (VCIP) 2005*, July 12-15, 2005, Beijing, China
9. Yongdong Wu, Aggregating signatures of MPEG-4 Elementary Streams, *IEEE International Conference on Multimedia & Expo (ICME) 2005*, July 6-8, 2005, Amsterdam-The Netherlands
10. Yongdong Wu, Tieyan Li, Robert H. Deng, Protecting Membership Dynamic Information in Large Scale Multicast Groups, *20th IFIP International Information Security Conference(SEC 2005)*, Chiba, Japan, May 30 - June 1, 2005
11. Yongdong Wu, Feng Bao, Robert H. Deng, Secure Human Communications Based On Biometrics Signals, *20th IFIP International Information Security Conference (SEC 2005)*, Chiba, Japan, May 30 - June 1, 2005
12. Huafei Zhu, Feng Bao, Tieyan Li, Yongdong Wu, Sequential Aggregate Signatures for Wireless Routing Protocols, *IEEE Wireless Communications and Networking Conf. (WCNC)*, CD-ROM, SA07, LA, Mar. 2005
13. HweeHwa Pang, Yongdong Wu, Evaluation of MPEG-4 IPMP Extension, *ICASSP*, II.1161-1164, Philadelphia, USA, Mar. 2005
14. Yongdong Wu, Linear Combination Collusion Attack and its Application on an Anti-Collusion Fingerprinting , *ICASSP*, II.13-16, Philadelphia, USA, Mar. 2005
15. Di Ma, Yongdong Wu, Robert Deng, Tieyan Li, Dynamic Access Control for Multi-privileged Group Communications, *ICICS 2004, LNCS3269*, pp.508-519, Spain(Accept Ratio 42/248))
16. Tieyan Li, YongDong Wu, Di Ma, HuaFei Zhu, Robert H. Deng, Flexible Verification of MPEG-4 Stream in Peer-to-Peer CDN, *ICICS 2004, LNCS3269*, pp.79-91
17. Yongdong Wu, and Robert H. Deng, Compliant Encryption of JPEG2000 Codestreams, *IEEE International Conf. on Image Processing*, pp.3447-3450, Oct. 24-27, 2004, Singapore
18. Yongdong Wu, Di Ma and Robert H. Deng, Progressive Protection of JPEG2000 Codestreams, *IEEE International Conf. on Image Processing*, pp.3439-3442, Oct. 24-27, 2004, Singapore
19. Yongdong Wu and Feng Bao, Collusion Attack on a Multi-key Secure Video Proxy Scheme, *12th ACM MultiMedia*, pp.380-383, Oct.10-16, 2004, New York, USA
20. Yongdong Wu, Bo Zhu and Yanjiang Yang, Framework of Authenticating Images with Close-loop Feedback, *IEEE Vehicular Technology Conference (VTC)*, Track 1203-17, CD-ROM, 2004
21. Yongdong Wu, Feng Bao, Flexible Access to Video Streaming, *IEEE Vehicular Technology Conference (VTC)*, Track 0401-05, CD-ROM, 2004
22. Yongdong Wu, Di Ma, Tieyan Li and Robert H. Deng, Classify Encrypted Data in Wireless Sensor Networks,

IEEE Vehicular Technology Conference (VTC), Track 0406-03, CD-ROM, 2004

23. Yongdong Wu, Detecting Tampered Image Blocks Using Error Correcting Code, IEEE International Conf. on Multimedia and Expo, CD-ROM, ISBN 0-7803-8604-3, Taipei, June, 2004
24. Robert H. Deng, Yongdong Wu, Di Ma, Securing JPEG2000 Code-Streams, International Workshop on Advanced Developments in Software and Systems Security, Dec. 2003
25. Yongdong Wu, Feng Bao, and Changsheng Xu, On the Security of Two Public Key Watermarking Schemes , 4th IEEE Pacific-Rim Conference on Multimedia, track2B2.5, CD-ROM, ISBN 0-7803-8186-6, Singapore, Dec. 2003
26. Yongdong Wu, Dynamic Ownership Verification , 4th IEEE Pacific-Rim Conference on Multimedia, Track 2B2.7, CD-ROM, ISBN 0-7803-8186-6, Singapore, Dec. 2003
27. Yongdong Wu, and Robert Deng, Adaptive Collusion Attack to a Block Oriented Watermarking Scheme, International Conference on Information Communication Security (ICICS), LNCS2836, pp.238-248, Inner-Mongolia, China, Oct.2003
28. Cheng Peng, Robert Deng, Yongdong Wu, Weizhong Shao, A Flexible and Scalable Authentication Scheme for JPEG2000 codestreams, ACM Multimedia, pp.433-441, Nov. 2003
29. Tieyan Li, Yongdong Wu, Trust on Web Browser: Attack vs. Defense, First MiAn International Conference on Applied Cryptography and Network Security, LNCS 2846, pp.241-253, Yunnan, China, Oct. 2003
30. Yongdong Wu, Zero-Distortion Authentication Watermarking, 6th International Conference on Information Security, LNCS 2851, pp. 325-337, Bristol, UK, Oct.2003
31. Yongdong Wu, and Changsheng Xu, A Fault Induced Attack to Semi-Fragile Image Authentication Schemes, SPIE Visual Communication and Image Processing vol.5150, pp.1875-1883, Lugano, Swiss, Jul. 2003
32. Yongdong Wu, Feng Bao, and Changsheng Xu, The Security Flaws in Some Authentication Watermarking Schemes, International Conference on Multimedia and Expo, pp. II 493-496, Baltimore, USA, Jul.2003
33. Yongdong Wu, Changsheng Xu and Feng Bao, Counterfeiting Attack on a Lossless Authentication Watermarking Scheme, Visualization2002, Pan-Sydney Area Workshop on Visual Information Processing, Vol. 22, pp.109-112, ISBN 1-920682-01-5, Sydney, Australia, Nov. 2003.
34. Yongdong Wu, Di Ma and Changsheng Xu, Efficient Object-based Stream Authentication, Indocrypto 2002, Lecture Notes in Computer Science 2551, pp.354-367, India, Dec. 2002
35. Changsheng Xu, Yongdong Wu, Namunu C. Maddage and Qi Tian, Content-based Digital Watermarking for All Audio Formats, 2002 International Computer Symposium: Workshop on Multimedia Technology, CD-ROM. Journal of Information Science and Engineering.
36. Yongdong Wu, Secure Broadcast Without Disclosing Subscriber's Information, International Conference On E-Business, pp. 630-633, Beijing, May 2002
37. Jeff Jianxin Yan and Yongdong Wu. An Attack on A Traitor Tracing Scheme, eprint 2001/067
38. Yongdong Wu, Songde Ma, Multiscale Morphological Filtering and Elastic Matching: Application to Quasar Recognition, Chinese Journal of Image and Graphics, 1997
39. Yongdong Wu and Songde Ma, Noise Removal and Feature Extraction Based on Multiscale Morphological Filtering, Chinese Journal of Electronics, 1997
40. Yongdong Wu and Songde Ma, "Monotone Property of Multiscale Morphology Filter", Journal of Computer, 1997
41. Yongdong Wu and Songde Ma, Adaptive Approximation of the Continuum of Quasar's Spectrum, 3rd Int. Conf. on Signal Processing, Vol. 2 pp. 1675-1678, Beijing, 1996
42. Yongdong Wu, et.al, Automatic Generation of Computer Programs from Control Law Diagram, Microcomputer, (in Chinese), vol. 15, no. 1, pp. 64-67, Jan., 1995.
43. Yongdong Wu, et. al, Management Program Design for Engineering Flight Simulator, 6th National Conf. on Control and Application, China, pp. 530-534, 1994