

## CURRICULUM VITAE



### NAME(姓名，含英譯)

賴飛羆 Feipei Lai

### PROFESSIONAL APPOINTMENT (現職，含英譯)

賴飛羆 Feipei Lai, Professor

國立台灣大學 生醫電子與資訊學研究所 教授

National Taiwan University Graduate Institute of Biomedical Electronics and Bioinformatics

### EDUCATION(學歷)

國立台灣大學電機工程系學士	1976.09~1980 .06
美國伊利諾大學 電腦碩士	1983.01~1984.05
美國伊利諾大學 電腦博士	1984.06~1987.06

### WORKING EXPERIENCE (經歷)

國立台灣大學 生醫電子與資訊學研究所 教授	2006.08~present
國立台灣大學 生醫電子與資訊學研究所 所長	2009.08~2012.07
社團法人中華民國資訊學會 理事長	2009.07~present
國立台灣大學資工系 電機系 教授	1994.08~present
伊利諾大學在台校友會 理事長	2009~2012
臺大醫院 副院長	2003.08~2009.07
國立台灣大學 計算機及資訊網路中心 主任	2002.08~2006.07
交通部財團法人台灣網路資訊中心 董事長	2005.12~2008.09
NCC 財團法人台灣網站分級推廣基金會 董事長	2004.11~2007.11
財團法人資訊工業策進會 董事	2003~2006

### MAJOR RESEARCH AREA(研究領域)

Medical Information Systems, Low Power SOC Computing

## **PUBLICATION(In the nearest 5 years)(發表、出版物)**

### **I. Journal papers:**

61. Y. F. Chung, K. H. Huang, H. H. Lee, F. P. Lai, and T. S. Chen, "Bidder-anonymous English Auction Scheme with Privacy and Public Verifiability," *The Journal of Systems and Software*, Vol. 81, No. 1, pp. 113-119, January 2008.
62. Y. F. Chung, H. H. Lee, F. P. Lai, and T. S. Chen, "Access control in user hierarchy based on elliptic curve cryptosystem," *Information Sciences*, Vol. 178, No. 1, pp. 230-243, Jan. 2008.
63. Po-Hsun Cheng, Sao-Jie Chen, Jin-Shin Lai, and Feipei Lai, "A Collaborative Knowledge Management Process for Implementing Healthcare Enterprise Information Systems," *IEICE Transactions on Information and Systems*, E91-D(6):1664-1672, June 2008.
64. Jeng-Wei Lin, Jan-Ming Ho, Li-Ming Tseng, and Feipei Lai, "Variant Chinese Domain Name Resolution," *ACM Transactions on Asian Language Information Processing (TALIP)*, Volume 7, Issue 4, pp. 11-29, November 2008.
65. J. C. Lin, K. H. Huang, F. P. Lai, and H. C. Lee, "Secure and Efficient Group Key Management with Shared Key Derivation," *The Journal of Computer Standards & Interfaces*, Vol. 31, Issue 1, pp. 192-208, January 2009.
66. K. H. Huang, Y. F. Chung, C. H. Liu, F. P. Lai, and T. S. Chen, "Efficient Migration for Mobile Computing in Distributed Networks," *The Journal of Computer Standards & Interfaces*, Volume 31, Issue 1, Pages 40-47, January 2009.
67. Bor-Shyh Lin, Bor-Shing Lin, Fok-Ching Chong, and Feipei Lai, "Higher Order Statistics-Based Radial Basis Function Network for Evoked Potentials," *IEEE Trans. on Biomedical Engineering*, Vol. 56, No. 1, pp. 93-100, January 2009.
68. K. H. Huang, Y. F. Chung, H. H. Lee, F. P. Lai, and T. S. Chen, "A Conference Key Agreement Protocol with Fault-tolerant Capability," *The Journal of Computer Standards & Interfaces*, Volume 31, Issue 2, Pages 401-405, February 2009.
69. Kuo-Hsuan Huang, Sung-Huai Hsieh, Yuan-Jen Chang, Feipei Lai, Sheau-Ling Hsieh, and Hsiu-Hui Lee, "Application of Portable CDA for Secure Clinical-document Exchange", *Journal of Medical Systems*, DOI 10.1007/s10916-009-9266-9, 25 February 2009.
70. Kuo-Chang Ting, Hung-Chang Lee, Hsiu-Hui Lee, and Feipei Lai, "An idle listening-aware energy efficient scheme for the DCF of 802.11n," *IEEE Transactions on Consumer Electronics*, Volume: 55, Issue: 2, Page(s): 447-454, May 2009.
71. Po-Hsun Cheng, Feipei Lai and Jin-Shin Lai, "A Service-Oriented Healthcare Message Alerting Architecture in an Asia Medical Center: A Case Study," *Int. J. Environ. Res. Public Health*, Vol. 6, Issue 6, pp. 1870-1881, June 17, 2009.
72. Tzu-Hsiang Yang, Yeali S. Sun and Feipei Lai, "A Scalable Healthcare Information System Based on a Service-oriented Architecture," *Journal of Medical Systems*, doi: 10.1007/s10916-009-9375-5, Sep. 24, 2009.
73. Po-Hsun Cheng, Heng-Shuen Chen, Feipei Lai and Jin-Shin Lai, "The Strategic Use of

Standardized Information Exchange Technology in a University Health System,” *Journal of Telemedicine and e-Health*, Vol. 16, No. 3, pp. 315-326, April 2010.

74. Z. Y. Wu, Y. F. Chung, F. Lai, and T. S. Chen, "A Password-based User Authentication Scheme for the Integrated EPR Information System," *Journal of Medical Systems*, Available online May 27, 2010. (SCI, IF: 0.654) (DOI: 10.1007/s10916-010-9527-7)

75. Chen YP, Hsieh SH, Cheng PH, Chien TN, Chen HS, Luh JJ, Lai JS, Lai F, Chen SJ, “An agile enterprise regulation architecture for health information security management,” *Telemed J E Health*. 2010 Sep;16(7):807-17. doi: 10.1089/tmj.2010.0023.

76. Z. Y. Wu, Y. C. Lee, F. Lai, H. C. Lee, and Y. F. Chung, "A Secure Authentication Scheme for Telecare Medicine Information Systems," *Journal of Medical Systems*, 2012, 36(3):1529-1535]. (SCI, IF: 0.654) (DOI: 10.1007/s10916-010-9614-9)

77. Hsin-Lu Chang, Michael J Shaw, Feipei Lai, Wen-Je Ko, Yi-Lwun Ho, Heng-Shuen Chen and Chin-Chung Shu, “U-Health: an example of a high-quality individualized healthcare service,” *Personalized Medicine*, Vol. 7, No. 6, pp. 677-687, Nov. 2010.

78. Zhen-Yu Wu, Chih-Wen Hsueh, Cheng-Yu Tsai, Feipei Lai, Hung-Chang Lee and Yufang Chung, “Redactable Signatures for Signed CDA Documents,” *Journal of Medical Systems*, 2012 Jun;36(3):1795-808. doi: 10.1007/s10916-010-9639-0. Epub 2010 Dec 23.

79. Wei-Hsin Chen, Yu-Wen Lu, Feipei Lai, Yin-Hsiu Chien, Wuh-Liang Hwu, “Integrating Human Genome Database into Electronic Health Record with Sequence Alignment and Compression Mechanism,” *Journal of Medical Systems*, 2012 Aug;36(4):2587-97. doi: 10.1007/s10916-011-9731-0. Epub 2011 May 11.

80. Zhen-Yu Wu, YJ Tseng, Yufang Chung, YC Chen, Feipei Lai, “A Reliable User Authentication and Key Agreement Scheme for Web-Based Hospital-Acquired Infection Surveillance Information System,” *Journal of Medical Systems*, 2012 Aug;36(4):2547-55. doi: 10.1007/s10916-011-9727-9. Epub 2011 May 10.

81. Zhen-Yu Wu, Yufang Chung, Feipei Lai, Tzer-Shyong Chen and Hung-Chang Lee, “An Enhanced Password-based User Authentication Scheme for Grid Computing,” *International Journal of Innovative Computing, Information and Control*, Vol. 7, No. 7, July 2011.

82. K-C. Ting, H-C. Lee and Feipei Lai, “A scalable, high-performance grouping DCF for the MAC layer enhancement of 802.11n,” *Int. J. Communication Networks and Distributed Systems*, Vol. 7, Nos. 1/2, pp. 101-118, 2011.

83. Hsien-Cheng Chou, Hung-Chang Lee, Chih-Wen Hsueh and Fei-Pei Lai, “Password Cracking Based on Special Keyboard Patterns,” *International Journal of Innovative Computing, Information and Control*, Volume 8, Number 1, pp. 387-402, January 2012.

84. Chia-Ping Shen, Chinburen Jigjidsuren, Sarangerel Dorjgochoo, Chi-Huang Chen, Wei-Hsin Chen, Chih-Kuo Hsu, Jin-Ming Wu, Chih-Wen Hsueh, Mei-Shu Lai, Ching-Ting Tan, Erdenebaatar Altangerel, and Feipei Lai, “A Data-mining Framework for Transnational

Healthcare System,” *Journal of Medical Systems*, August 2012, Volume 36, Issue 4, pp. 2565-2575.

85. Chia-Ping Shen, Wen-Chung Kao, Yueh-Yiing Yang, Ming-Chai Hsu, Yuan-Ting Wu, and Feipei Lai, “Detection of cardiac arrhythmia in electrocardiograms using adaptive feature extraction and modified support vector machines,” *Expert Systems With Applications*, Vol. 39, No. 9, pp. 7845 – 7852, July, 2012, doi:10.1016/j.eswa.2012.01.093.

86. Li-Chin Chen, Chi-Wen Chen, Yung-Ching Weng, Rung-Ji Shang, Hui-Chu Yu, Yufang Chung, Feipei Lai, “An Information Technology Framework for Strengthening Telehealthcare Service Delivery,” *Journal of Telemedicine and e-Health*, Vol. 18, No. 8, pp. 596-603, October 2012.

87. Yi-Ju Tseng, Jung-Hsuan Wu, Xiao-Ou Ping, Hui-Chi Lin, Ying-Yu Chen, Rong-Ji Shang, Ming-Yuan Chen, Feipei Lai, Yee-Chun Chen, “A Web-Based Multidrug-Resistant Organisms Surveillance and Outbreak Detection System with Rule-Based Classification and Clustering,” *Journal of Medical Internet Research*, Vol. 14, No. 5, October 2012, doi:10.2196/jmir.2056.

88. Hwan-Jeu Yu, Chia-Ping Shen, Sarangerel Dorjgochoo, Chi-Huang Chen, Jin-Ming Wu, Mei-Shu Lai, Ching-Ting Tan, Chinburen Jigjidsuren, Erdenebaatar Altangerel, Hung-Chang Lee, Chih-Wen Hsueh, Yufang Chung, and Feipei Lai, “A physician order category-based clinical guideline comparison system,” *Journal of Medical Systems*, 2012 Dec;36(6):3741-53. DOI 10.1007/s10916-012-9847-x.

89. Hsien-Cheng Chou, Hung-Chang Lee, Fei-Pei Lai, Hwan-Jeu Yu, Kuo-Hsuan Huang and Chih-Wen Hsueh, “Password Cracking Based on Learned Patterns from Disclosed Passwords,” *International Journal of Innovative Computing, Information and Control*, Volume 9, Number 2, pp. 821-839, February 2013.

90. Xiao-Ou Ping, Yi-Ju Tseng, Yufang Chung, Ya-Lin Wu, Ching-Wei Hsu, Pei-Ming Yang, Guan-Tarn Huang, Feipei Lai, and Ja-Der Liang, “Information Extraction for Tracking Liver Cancer Patients’ Statuses: from Mixture of Clinical Narrative Report Types,” *Journal of Telemedicine and e-Health*, Vol. , No. , pp. , October 2013.

91. Wei-Hsin Chen, Sheau-Ling Hsieh, Kai-Ping Hsu, Han-Ping Chen, Xing-Yu Su, Yi-Ju Tseng, Yin-Hsiu Chien, Wuh-Liang Hwu, and Feipei Lai, “Web Services Based Newborn Screening System for Metabolic Diseases: Machine Learning vs Clinicians,” *Journal of Medical Internet Research*, Vol. , No. .

92. Hwan-Jeu Yu, Kuo-Hsin Chen, Hsien-Cheng Chou, Jin-Ming Wu, Sarangerel Dorjgochoo, Adilsaikhon Mendjargal, Erdenebaatar Altangerel, Chih-Wen Hsueh, and Feipei Lai, “A Sharable Cloud-Based Pancreaticoduodenectomy Collaborative Database for Physicians: Emphasis on Security and Clinical Rule Supporting,” *Computer Methods and Programs in Biomedicine*, Vol. , No. , pp. ,

93. Chia-Ping Shen, Shih-Ting Liu, Wei-Zhi Zhou, Feng-Seng Lin, Andy Yan-Yu Lam, Hsiao-Ya Sung, Wei Chen, Jeng-Wei Lin, Ming-Jang Chiu, Ming-Kai Pan, Jui-Hung Kao,

Jin-Ming Wu, and Feipei Lai, "A Physiology-Based Seizure Detection System for Multichannel EEG," PLOS ONE, Accepted, 2013.

## II. Conference Papers:

57. Wen-Hsien Fang, Mon-Chau Shie, Ming-Lu Wu and F. Lai, "Unified Fully-Pipelined VLSI Implementations of Two-Dimensional Discrete Trigonometric Transforms," 1998 IEEE Asia Pacific Conference on Circuits and Systems: Microelectronics and Integrating Systems, Chiangmai, Thailand, Nov. 24-27, 1998. (Proc. pp. 623-626)
58. Mon-Chau Shie, Wen-Hsien Fang, Kuo-Jui Hung and F. Lai, "Fast Block Motion Estimation by Using Adaptive Simulated Annealing," 1998 IEEE Asia Pacific Conference on Circuits and Systems: Microelectronics and Integrating Systems, Chiangmai, Thailand, Nov. 24-27, 1998. (Proc. pp. 607-610)
59. Rung-Ji Shang, Feipei Lai, Jen-Chiun Lin, "Bulk Transfer in Object-Based DSM," The Second International Conference on Parallel and Distributed Computing and Networks (PDCN'98), Brisbane, Australia, 14-16 December 1998. (Proc. pp. 536-541)
60. Kuang-Hung Pan, Hsiao-Kuang Wu, Rung-Ji Shang, and Feipei Lai, "Performance Analysis of Distributed Broadcast Algorithms in Wireless Networks with Consideration of Channel Reliability," The Second International Conference on Parallel and Distributed Computing and Networks (PDCN'98), Brisbane, Australia, 14-16 December 1998. (Proc. pp. 549-554)
61. Yen-Wen Lin, Feipei Lai and Hsiao-Kuang Wu, "Lightweight Commit Protocol for Mobile Clients," The 1998 International Computer Symposium, Tainan, Taiwan, December 1998. (Proc. pp. 76-83)
62. Shu-Lin Hwang and Feipei Lai, "RABTB: Range Associative Branch Target Buffer," Australasian Computer Science Week '99, Auckland, New Zealand, 18-21 January 1999. (Proc. pp. 109-121)
63. Yen-Wen Lin, Hsiao-Kuang Wu and Feipei Lai, "Effective Proxy Model for Supporting High Quality of Services for Light-Powered Mobile Client," The 13th International Conference on Information Networking, Cheju, Korea, 27-29 January 1999. (Proc. pp. )
64. Kuang-Hung Pan, Hsiao-Kuang Wu, Rung-Ji Shang, and Feipei Lai, "The Impacts of Synchronized and Non-synchronized Reception on Broadcast in Multihop Radio Networks," 16th National Radio Science Conference, Cairo, Egypt, Feb. 23-25, 1999. (Proc. C24)
65. Kuang-Hung Pan, Hsiao-Kuang Wu, Rung-Ji Shang, and Feipei Lai, "Performance Analysis of Broadcast in Synchronized Multihop Wireless Networks," The 7th International Conference on High Performance Computing and networking Europe, Amsterdam, The Netherlands, April 12-14, 1999. (Proc. 493-502)
66. Kuang-Hung Pan, Hsiao-Kuang Wu, Rung-Ji Shang, Feipei Lai, and Yen-Wen Lin, "Communication over Two-way Waveform Channels in Wireless Networks," 1999 IEEE Canadian Conference on Electrical & Computing Engineering, Albert, Canada, May 9-12,

1999. (Proc. )

67. I-Horng Jeng and Feipei Lai, "A New Methodology for Object-oriented ASIP Architecture Codesign," 3rd IMACS/IEEE International Multiconference on Circuits, Systems, Communications, and Computers, Athens, Greece, July 4-8, 1999. (Proc. 115-121)

68. Shanq-Jang Ruan, Rung-Ji Shang, Feipei Lai, Shyh-Jong Chen and Xian-Jun Huang, "A Bipartition-Codec Architecture to Reduce Power in Pipelined Circuits," 1999 IEEE/ACM International Conference on Computer Aided Design, San Jose, USA, Nov. 7-11, 1999. (Proc. 84-89)

69. Shu-Lin Hwang, Jing Liang Tsai and Feipei Lai, "New Schemes of Cache Memory for Multimedia Applications," 1999 National Computer Symposium, Computer Architecture Workshop, Taipei, Taiwan, Nov. 20-21, 1999. (Proc. )

70. R. J. Shang, E. Naroska, Feipei Lai and U. Schwiegelshohn, "Hybrid Parallel Circuit Simulation Approaches," International Conference on Parallel Architectures and Compilation Techniques, (PACT'00), Philadelphia, USA, Oct. 15-19, 2000. (Proc. )

71. Kuen-Pin Wu, Feipei Lai, Shanq-Jang Ruan, and C.K. Tzeng, "On Key Distribution in Secure Multicasting," The 25th Annual IEEE Conference on Local Computer Networks, Tampa, Florida, November 8-10, 2000. (Proc. 208-212)

72. Shanq-Jang Ruan, Jen-Chiun Lin, Po-Hung Chen, Feipei Lai, Kun-Lin Tsai and Chung-Wei Yu, "An Effective Output-Oriented Algorithm for Low Power Multipartition Architecture," The 7th IEEE International Conference on Electronics, Circuits & Systems, Kaslik, Lebanon, December 2000. (Proc. 609-612)

73. Shu-Lin Hwang and Feipei Lai, "Two Cache Lines Prediction for a Wide-Issue Micro-architecture," ACSAC-2001, Gold Coast, Australia, January 2001. (Proc. 71-79)

74. Po-Hung Chen, Shanq-Jang Ruan, Kuen-Pin Wu, Dai-Xun Hu, Feipei Lai and Kun-Lin Tsai, "An Entropy-Based Algorithm to Reduce Area Overhead for Bipartition-Codec Architecture," 2001 IEEE International Symposium on Circuits and Systems, Sydney, Australia, May 6-9, 2001. (Proc. )

75. Shanq-Jang Ruan, Jen-Chiun Lin, Po-Hung Chen, Kun-Lin Tsai and Feipei Lai, "Synthesis of Partition-codec Architecture for Low Power and Small Area Circuit Design," 2001 IEEE International Symposium on Circuits and Systems, Sydney, Australia, May 6-9, 2001. (Proc. )

76. I-Horng Jeng, Feipei Lai, Edwin Naroska and Uwe Schwiegelshohn, "Multimedia ASIP SoC Codesign Based on Multicriteria Optimization," 2001 IEEE International Conference on Consumer Electronics, L.A., CA, USA, June 19-21, 2001. (Proc. 342-343)

77. Chih-Kuang Tseng, Kuen-Pin Wu, Jen-Chiun Lin, Chun-Yen Chou and Feipei Lai, "A Constant Size Rekeying Message Framework for Secure Multicasting," 2001 The 26th Annual IEEE Conference on Local Computer Networks (LCN), Tampa, Florida, USA, Nov. 15-16, 2001. (Proc. 380-385)

78. Po-Hung Chen, Hung-Ming Chen, Kuo-Liang Yeh, Mon-Chau Shie and Feipei Lai,

"BITCEM: An Adaptive Block Motion Estimation Based on Center of Mass Object Tracking via Binary Transform," 2001 IEEE Int'l Symp. on Intelligent Signal Processing and Communication Systems, Nashville, Tenn., USA, Nov. 20-23, 2001. (Proc. )

79. Yen-Jen Chang and Feipei Lai, "Sentry Tag: An Efficient Filter Scheme for Low Power Cache," ACSAC-2002, Melbourne, Australia, January 2002. (Proc. )

80. Yen-Jen Chang, Feipei Lai and Shanq-Jang Ruan, "An Efficient Two-Level Filter Scheme for Low Power Cache," 11th IEEE/ACM International Workshop on Logic & Synthesis, New Orleans, Louisiana, USA, June 4-7, 2002. (Proc. 61-66)

81. Shanq-Jang Ruan, Edwin Naroska, Chia-Lin Ho, Feipei Lai, "Power Analysis of Bipartition and Dual-Encoding Architecture for Pipelined Circuits," IEEE International Conference on Computer Design, Sep. 2002 (Proc. )

82. Yen-Jen Chang, Feipei Lai, "Cache Design for Eliminating the Address Translation Bottleneck and Reducing the Tag Area Cost," IEEE International Conference on Computer Design, Sep. 2002 (Proc. )

83. Shanq-Jang Ruan, Edwin Naroska, Yen-Ren Chang, Chia-Lin Ho, Feipei Lai, "Energy Analysis of Bipartition Architecture for Pipelined Circuits," in proceeding of IEEE Asia Pacific Conference on Circuits and Systems, Singapore, Dec. 2002.

84. Yen-Jen Chang, Feipei Lai, "Paged Cache: An Efficient Partition Architecture for Reducing Power," in proceeding of IEEE Asia Pacific Conference on Circuits and Systems, Singapore, Dec. 2002.

85. Wen-jiun Huang, Yuh-hua Hu, Feipei Lai, and Chun-Yen Chou, "A Performance Report of a Fast TTS Implementation," The Second International Workshop for Asian Public Key Infrastructure, Taipei, Taiwan, Oct. 30 - Nov. 1, 2002. (Proc. 55-58)

86. Jen-Chiun Lin, Chun-Yen Chou and Feipei Lai, "A Distributed Key Management Protocol for Dynamic Groups," 2002 The 27th Annual IEEE Conference on Local Computer Networks (LCN), Tampa, Florida, USA, Nov. 15-16, 2002. (Proc. )

87. Po-Hung Chen, Hung-Ming Chen, Kuo-Jui Hung, Mon-Chau Shie and Feipei Lai, "Robust Fuzzy-Reasoning Based Algorithm for Fast Block Motion," .IEEE International Symp. On Intelligent Signal Processing and Communication Systems, Kaohsiung, Taiwan, Nov. 21-24, 2002. (Proc. )

88. Kuo-Chang Ting, and Feipei Lai "Analysis and Design of Routing Based Hierarchical Internet Cache Protocol Architecture," 2002 International Computer Symposium, Hualein, Taiwan, Dec. 18-21. (Proc. )

89. Yen-Jen Chang, and Feipei Lai "Improve Web Proxy Performance by Alleviating Disk I/O Overhead," 2002 International Computer Symposium, Hualein, Taiwan, Dec. 18-21. (Proc. )

90. Mao-yu Jan, Yung-ching Weng and Feipei Lai "Performance Issues in Squid," 2002 International Computer Symposium, Hualein, Taiwan, Dec. 18-21. (Proc. )

91. Edwin Naroska, Shanq-Jang Ruan, Chia-Lin Ho, Said Mchaalia, Feipei Lai, Uwe Schwiegelshohn, "A Novel Approach for Digital Waveform Compression," ASP-DAC 2003,

Kitakyushu, Japan, January 21-24, 2003. (Proc. )

92. Edwin Naroska, Shanq-Jang Ruan, and Feipei Lai, "On Optimizing Power and Crosstalk for Bus Coupling Capacitance Using Genetic Algorithm," IEEE International Symposium on Circuits and Systems, Bangkok, Thailand, May 25-28, 2003.

93. Yuh-hua Hu, Lih-chung Wang, Jiun-Ming Chen, Feipei Lai and Chun-yen Chou, "An Implementation of Public Key Cryptosystem TTM with Linear Time Complexity for Decryption," 2003 IEEE International Symposium on Information Theory, Yokohama, Japan, June, 2003.

94. Shun-Chuan Chen, Ang Lee, Hsuan-Wei Chen, Kuo-Hao Chao, Yu-Cheng Huang and Feipei Lai, "E-Vanguard for Emergency - A Wireless System for Rescue and Healthcare," 5th International Workshop on Enterprise Networking and Computing in Healthcare Industry, Santa Monica, USA, June 6-7, 2003.

95. Yen-Jen Chang, Chia-Lin Yang and Feipei Lai, "A Power-Aware SWDR Cell for Reducing Cache Write Power," 2003 International Symposium on Low Power Electronics and Design, Seoul, Korea, August 25-27, 2003. (Proc. 14-17)

96. Kun-Lin Tsai, Feipei Lai, Shanq-Jang Ruan and Szu-Wei Chang, "State Reordering for Low Power Combinational Logic," 8th Asia-Pacific Conference, ACSAC 2003, Aizu-Wakamatsu, Japan, September. (Proc. 268-276)

97. Hung-Ming Chen, Po-Hung Chen, Tai-Jee Pan, and Feipei Lai, "Designing Platform-Based System Power Management on a Smart Tablet Appliance," 10th IEEE International Conference on Electronics, Circuits and Systems, Sharjah, United Arab Emirates, Dec. 14-17, 2003.

98. Yen-Jen Chang and Feipei Lai, "Value-Conscious Cache: Simple Technique for Reducing Cache Access Power," 2004 DATE, Design Automation and Test in Europe, Paris, France, February 16-20, 2004.

99. Yen-Jen Chang, Yung-Ching Weng and Feipei Lai, "Enhanced Object Management for High Performance Web Proxies," The 19th Annual ACM Symposium on Applied Computing, Nicosia, Cyprus, March 14-17, 2004. (Proc. 1711-1716)

100. Chuan-heng Hsiao, Ming-long Lee, Yuan-Chung Shen and Feipei Lai, "A Design of Small-area Automatic Wheelchair," IEEE International Conf. on Networking, Sensing and Controlling, Taipei, Taiwan, March 21-23, 2004. (Proc. 1341-1345)

101. Jen-Chiun Lin, Chun-Yen Chou, Feipei Lai and Hung-Chang Lee, "Optimizing Centralized Secure Group Communication with Binary Key Tree Recomposition," The 18th International Conference on Advanced Information Networking and Applications (AINA 2004), Fukuoka, Japan, March 29-31, 2004. (Proc. 202-207)

102. H.-M. Chen, P.-H. Chen, T.-J. Pan and F. Lai, "Wirange: A Smart Wireless Field Test Analyzer on the Embedded Tablet," IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS'04), May 2004, Toronto, Canada.

103. Jeng-Wei Lin, Ray-I Chang, Jan-Ming Ho, and Feipei Lai, "Aggressive Traffic



Smoothing for Delivery of Online Multimedia,” PCM’2004 (Pacific-Rim Conference on Multimedia), Tokyo, Japan, Dec. 2004. Lecture Notes in Computer Science, Vol. 3331, pp. 114-121, 2004.

104. Lih-Chung Wang, Yuh-Hua Hu, Feipei Lai, Chun-Yen Chou, and Bo-Yin Yang, “Tractable Rational Map Signature,” Public Key Cryptography – PKC 2005, Les Diablerets, Switzerland, January 2005, Lecture Notes in Computer Science, Vol. 3386, pp. 244-257.

105. Kun-Lin Tsai, Szu-Wei Chang, Feipei Lai and Shanq-Jang Ruan, “A Low Power Scheduling Method Using Dual  $V_{dd}$  and Dual  $V_{th}$ ,” 2005 IEEE International Symposium on Circuits and Systems, Kobe Japan, May 23-26, Kobe, Japan.

106. Hung-Ming Chen, Po-Hong Chen, Tai-Jee Pan and Feipei Lai, “Design and Implementation of a Hard Disk-based Portable Entertainment Device for Managing Media Contents on the Go,” International Symposium on Consumer Electronics, Macau, pp. 328-333, June 2005.

107. Kun-Lin Tsai, Shanq-Jang Ruan, Li-Wei Chen, Feipei Lai and Edwin Naroska, “Low Power Dynamic Bus Encoding for Deep Sub-micron Design,” The 3rd International IEEE Northeast Workshop on Circuits & Systems, June 19-22, 2005, Québec City, Canada. (Proc. )

108. Edwin Naroska, Shanq-Jang Ruan, Uwe Schwiegelshohn and Feipei Lai, “Optimal Permutation and Spacing for Unbiased Random, Counter, and Instruction Address Buses,” The 3rd International IEEE Northeast Workshop on Circuits & Systems, June 19-22, 2005, Québec City, Canada. (Proc. )

109. Jeng-Wei Lin, Jan-Ming Ho, Li-Ming Tseng, and Feipei Lai, “A Web Redirection Service for Variant Chinese Domain Name Resolution,” International Conference on Information Technology and Applications, Sydney, Australia, July 2005.

110. Jen-Chiun Lin, H-C Lee and Feipei Lai, “Efficient group Key Management Protocol with One-way Key Derivation,” The IEEE Conference on Local Computer Networks, Sydney, Australia, November 2005.

111. Yuh-Hua Hu, Lih-Chung Wang, Chun-Yen Chou, and Feipei Lai, "Similar Keys of Multivariate Quadratic Public Key Cryptosystems," CANS 2005, Lecture Notes in Computer Science 3810 pp. 211-222, Springer-Verlag, Dec. 2005.

112. Chih-Peng Chang, Jen-Chiun Lin and Feipei Lai, “Trust-group-based authentication services for mobile ad hoc networks,” International Symposium on Wireless Pervasive Computing 2006, Phuket, Thailand, January 2006.

113. Lin-Jiun Tsai, Jen-Chiun Lin and Feipei Lai, “SWARM: Secure Wireless Ad-hoc network Reliance Management,” International Symposium on Wireless Pervasive Computing 2006, Phuket, Thailand, January 2006.

114. Lih-Chung Wang, Bo-Yin Yang, Yuh-Hua Hu, Feipei Lai, “A "Medium-Field" Multivariate Public-Key Encryption Scheme,” Topics in Cryptology - CT-RSA 2006, The Cryptographers' Track at the RSA Conference 2006, San Jose, CA, USA, February 13-17, 2006, Proceedings. Lecture Notes in Computer Science 3860, Springer, 2006, pp. 132-149.

115. H. S. Chen, C. E. Tai, G. Lee, M. J. Tsai, J. J. Luh, P. H. Cheng and Feipei Lai, "Application of VoIP Technology with Mobile Health Information System in a Wireless Hospital," The International Trade Event and Conference for eHealth, Telemedicine and Health ICT, Luxembourg, April 5-7, 2006, pp. 361-364.
116. Kun-Lin Tsai, Ju-Yueh Lee, Shanq-Jang Ruan, and Feipei Lai, "Low Power Scheduling Method using Multiple Supply Voltages," IEEE International Symposium on Circuits and Systems, Island of Kos, Greece, May 21-24, 2006.
117. T. H. Yang, P. H. Cheng, C. H. Yang, F. Lai, C. L. Chen, H. H. Lee, K. P. Hsu, C. H. Chen, C. T. Tan, and Y. S. Sun, "A Scalable Multi-tier Architecture for the National Taiwan University Hospital Information System based on HL7 Standard," The 19th IEEE International Symposium of Computer-Based Medical Systems, Salt Lake City, USA, June 22-23, 2006, pp. 99-104.
118. Y. F. Chung, F. P. Lai, and T. S. Chen, "Multicasting key management system for the internet," Proceedings of the 5th International Conference on Information and Management Sciences, Chengdu, China, 1-8 July 2006, pp. 216-228.
119. Li-Fan Ko, Jan-Chun, Lin Chi-Huang, Chen, Jay-Shien Chang, Faipai Lai, Kay-Pin Hsu, Tso-Hang Yang, Po-Hsung Cheng, Chia-Chen Wen, Jun-Lian Chen, and Siao-Lin Hsieh, "HL7 Middleware Framework for Healthcare Information System," Healthcom 2006, New Delhi, India, August 17-19.
120. Kuangtse Chien, Wanjiun Liao, I-Ching Hou, Chiahung Chien, Zesheing Yang, Feipei Lai, ChungLee Niu, and Albert Ho, "Location-Aware Healthcare in u-Hospitals," Healthcom 2006, New Delhi, India, August 17-19.
121. Yuh-Hua Hu, Chun-Yen Chou, Lih-Chung Wang, Feipei Lai, "Cryptanalysis of Variants of UOV," ISC 2006, Lecture Notes in Computer Science 4176, pp. 161-170, Springer-Verlag, August 30 - September 2, 2006, Samos, Greece.
122. Sheau-Ling Hsieh, Feipei Lai, Po-Hsun Cheng, Chuen-Liang Chen, Hsiu-Hui Lee, Wen-Nung Tsai, Yung-Ching Weng, Sung-Huai Hsieh, Kai-Pin Hsu, Li-Fan Ko, Chi-Huang Chen, Tzu-Hsiang Yang, "An Integrated Healthcare Enterprise Information Portal and Healthcare Information System Framework," The 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, August 30-September 3, 2006, New York City, New York, USA.
123. Kuo-Chang Ting, Mao-yu Jan, Sung-huai Hsieh, Hsiu-Hui Lee† and Feipei Lai, "Design and Analysis of Grouping-Based DCF (GB-DCF) Scheme for the MAC layer Enhancement of 802.11 and 802.11n," ACM MSWiM 2006, Proceedings of the Ninth ACM Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems, Torremolinos, Malaga, Spain, Oct. 2-6.
124. Kuo-Chang Ting, Mao-yu Jan, Sung-huai Hsieh, Hsiu-Hui Lee, and Feipei Lai, "Design and Analysis of Grouping-Based DCF (GB-DCF) Scheme for the MAC layer Enhancement of 802.11 and 802.11e," 3rd IEE Mobility Conference 2006, Bangkok, Thailand, 25-27 October

2006.

125. Y. F. Chung, Z. Y. Wu, F. P. Lai, and T. S. Chen, "Anonymous signcryption in ring signature scheme over elliptic curve cryptosystem," Proceedings of the 9th Joint Conference on Information Sciences, Kaohsiung, Taiwan, 8-11 Oct. 2006, pp. 759-762.

126. Y. F. Chung, Z. Y. Wu, F. P. Lai, and T. S. Chen, "Unconditionally secure cryptosystem based on quantum cryptography," Proceedings of the 9th Joint Conference on Information Sciences, Kaohsiung, Taiwan, 8-11 Oct. 2006, pp. 763-766.

127. S. L. Hsieh, Y. C. Weng, Sung-huai Hsieh, F. P. Lai, K. P. Hsu, W. N. Tsai, "Wireless/Wired Collaborative Remote Consultation Emergency Healthcare Information Systems Framework," TENCON 2006, Nov. 14-17, Hong-Kong, China.

128. Kuo-Chang Ting, Mao-yu Jan, Sung-huai Hsieh, Hsiu-Hui Lee and Feipei Lai, "GDCF: Grouping DCF for the MAC layer enhancement of 802.11," Globecom 2006, San Francisco, California, USA, Nov. 27 – Dec. 1.

129. Y. F. Chung, C. H. Liu, F. P. Lai, and T. S. Chen, "Threshold signature scheme resistible for conspiracy attack," The 7th International Conference on Parallel and Distributed Computing, Applications and Technologies, Taipei, Taiwan, 4-7 Dec. 2006, pp. 479-483.

130. J. Chang, J. S. Lai, P. H. Cheng and Feipei Lai, "Portable CDA for the Exchange of Clinical Documents," HealthCom 2007, Taipei, Taiwan, June 19-22, pp. 1-5.

131. Mei-Ju Sua, Heng-Shuen Chen, Chung-Yi Yang, Sao-Jie Chen, Wen-Jeng Lee, Po-Hsun Cheng, Ping-Kung Yip, Hon-Mon Liu, Feipei Lai and Daniel Racocanu, "A Preliminary Study of Medical Image Distributed Intelligent Access Integrated with Electronic Medical Records System for Brain Degenerative Disease Abstract," HealthCom 2007, Taipei, Taiwan, June 19-22, pp.19-23.

132. Chien-Ming Tu, Mei-Yu Tang, Feipei Lai, Hsing-Yu Chang, Wu-Liang Hwu, and Yin-Hsiu Chien, "The Design and Implementation of a Next Generation Information System for Newborn Screening," HealthCom 2007, Taipei, Taiwan, June 19-22, pp.24-28.

133. Xiao-Ou Ping, Li-Fan Ko, Rung-Ji Shang, Feipei Lai, Chi-Huang Chen, Kuo-Hsuan Hwang, and Sarangerel Dorjgochoo, "Dynamic Messages Creation Method for HL7 based Healthcare Information System," HealthCom 2007, Taipei, Taiwan, June 19-22, pp.150-155.

134. Heng-Shuen Chen, Mei-Ju Su, Tsung-Hsuan Tsai, Shih-Shung teng, Han-Wei Zhang, Jin-Shih Lai, Feipei Lai and Ching-Yu Chen, "U-Care for the elderly: Implementation of a Comprehensive Living and health Care Network," HealthCom 2007, Taipei, Taiwan, June 19-22, pp.187-190.

135. Hsieh, S. H.; Hsieh, S. L.; Weng, Y. C.; Yang, T. H.; Lai, Feipei; Cheng, P. H.; Ping, X.O.; Jan, M. Y.; Lin, J.C.; Peng, C.H.; Huang, K.H.; Ko, L. F.; Chen, C. H.; and Hsu, K. P, "Middleware based Inpatient Healthcare Information System," The IEEE 7th International Conference on Bioinformatics and Biomedical Engineering (BIBE 2007), October 14-17, 2007, Boston, Massachusetts, USA, pp. 1230-1234.

136. Kuo-Chang Ting, Hsiu-Hui Lee, Feipei Lai, "Design and Analysis of Enhanced

Grouping DCF Scheme for the MAC Layer Enhancement of 802.11n with Ultra-high Data Rate," IEEE International Symposium on Wireless Communication Systems 2007, Trondheim, Norway, Oct. 17-19, 2007.

137. Yung-Ching Weng, Sheau-Ling Hsieh, Sung-huai Hsieh, and Feipei Lai, "Design and Enhance a Dynamic Healthcare Portal Site," IEEE/WIC/ACM International Conference on Web Intelligence and International Conference on Intelligent Agent Technology - Workshops, 2-5 November 2007, Silicon Valley, CA, USA, pp. 173-176.

138. Sung-Huai Hsieh, Sheau-Ling Hsieh, Yung-Ching Weng, Yin-Hsiu Chien, Zhenyu Wang, Po-Hao Chen, Hsing-Yu Chang, Feipei Lai, and Wu-Liang Hwu, "Web Services Based Newborn Screening System with Support Vector Machines," ICITA 2008, Cairns, Queensland, Australia, June 23-26, pp. 327-p332.

139. Tsung-Yu Chuang, Feipei Lai, Yung-Ching Weng, Sung-Huai Hsieh, and Sheau-Ling Hsieh, "Patient-and-Family-Centered Intelligent Medical Social Work Information System," 2008 10th IEEE Intl. Conf. on e-Health Networking, Applications and Service (HealthCom 2008), July 7-9, pp. 318-322, 2008, Singapore

140. Sebastian Ang, Chin-Hung Peng, Jürgen Kemper, Uwe Schwiegelshohn and Feipei Lai, "An Enhanced Low-Power Precomputation-Based Content-Addressable Memory Architecture," The 16th IFIP/IEEE International Conference on Very Large Scale Integration, Oct. 13-15, 2008, Rhodes Island, Greece.

141. Sung-Huai Hsieh, Sheau-Ling Hsieh, Yin-Hsiu Chien, Zhenyu Wang, Yung-Ching Weng and Feipei Lai, "A Newborn Screening System based on the Service-Oriented Architecture Embedded Support Vector Machine Mechanism", The 4th IEEE International Symposium on Service-Oriented System Engineering, Dec. 18-19, 2008, pp. 196-201, Jhongli, Taiwan.

142. Sung-Huai Hsieh, Po-Hsun Cheng, Sheau-Ling Hsieh, Po-Hao Chen, Yung-Ching Weng, Yin-Hsiu Chien, Zhenyu Wang, and Feipei Lai, "A Multi Model Voting Enhancement for Newborn Screening Healthcare Information System", First KES International Symposium on Intelligent Decision Technologies, IDT'09, Himeji, Japan, 23-24 April 2009.

143. Sung-Huai Hsieh, I-Ching Hou, Sheau-Ling Hsieh, Ching-Ting Tan, Po-Chao Shen, Hui-Chu Yu, and Feipei Lai, "Design and Implementation of Electronic Medication Administration Record," First KES International Symposium on Intelligent Decision Technologies, IDT'09, Himeji, Japan, 23-24 April 2009.

144. Sung-Huai Hsieh, Sheau-Ling Hsieh, Chia-Ping Shen, Wei-Hsin Chen, Po-Hsun Cheng, Kai-Ping Hsu, Chi-Huang Chen, and Feipei Lai, "Web Services Based Bio-signal System Leveraging Support Vector Machines," IEEE Bioinformatics and BioEngineering (BIBE), Taichung, Taiwan, June 2009, pp. 254-259.

145. Sung-Huai Hsieh, Yin-Hsiu Chien, Chia-Ping Shen, Wei-Hsin Chen, Po-Hao Chen, Sheau-Ling Hsieh, Po-Hsun Cheng, and Feipei Lai, "Newborn Screening System Based on Adaptive Feature Selection and Support Vector Machines," in Proc. The 9th IEEE International Conference on Bioinformatics and BioEngineering (BIBE), Taichung, June 2009,

pp. 344-347 (EI).

146. Jung-Hsuan Wu, Yee-Chun Chen, Sung-huai Hsieh, Hui-Chi Lin, Ying-Yu Chen, Po-Hsun Cheng, Farn Wang, Feipei Lai, "Real-time Automated MDRO Surveillance System," BIOCOMP 2009, July 13-16, 2009, Las Vegas, Nevada, USA, pp. 764-769.

147. Li-Fan Ko, Cheng-Hei Huang, Rung-Ji Shang and Feipei Lai, "Building an Adaptive Electronic Healthcare Record System using Semantic Web Services, " in Proc. IEEE International Conference on e-Health Networking, Application and Services (HealthCom 2009), Sydney, Australia, Dec. 2009 (EI)

148. Wei-Hsin Chen, Yu-Wen Lu, Chia-Ping Shen, Kai-Ping Hsu, Fei-Pei Lai, Yin-Hsiu Chien, "Design of Genome Database System with the Sequence Alignment and Data Compression Mechanism, " in Proc. IEEE International Conference on e-Health Networking, Application and Services (HealthCom 2009), Sydney, Australia, Dec. 2009 (EI)

149. Xiao-Ou Ping, Mei-Shu Lai, Ching-Ting Tan, J. D. Liang, Hung-Chang Lee, Chi-Huang Chen, Yi-Ju Tseng, Zi-Jun Wang, and Feipei Lai, "An infrastructure for clinical data extraction, medical knowledge and mining services sharing," The First AMA-IEEE Medical Technology Conference on Individualized Healthcare, Washington D. C., USA, March 21-23, 2010.

150. Feipei Lai, Yu-Tzu Dai, Chin-Chung Shu, Ying-Hsien Chen, Hui-Chun Huang, Li-Chin Chen, "An Infrastructure to Enabling Integration of Personal Telehealthcare into Taiwan National Health Insurance," The First AMA-IEEE Medical Technology Conference on Individualized Healthcare, Washington D. C., USA, March 21-23, 2010.

151. H. L. Chang, Michael J. Shaw, Feipei Lai, Y. L. Ho, W. J. Ko, Hang-Shuen Chen, "Delivering High-Quality Individualized Healthcare: An Illustration of U-Health Service Design in National Taiwan University Hospital," The First AMA-IEEE Medical Technology Conference on Individualized Healthcare, Washington D. C., USA, March 21-23, 2010.

152. Chung-Huang Jiang, Kun-Lin Tsai, Feipei Lai and Shun-Hung Tsai, "Distinguishable Error Detection Method for Network on Chip," in Proc. of IEEE Intl. Symposium on Circuits and Systems (ISCAS), Paris, France, May 2010, pp. 3733-3736.

153. Kun-Lin Tsai, Feipei Lai, Chien-Yu Pan, Di-Sheng Xiao, Hsiang-Jen Tan and Hung-Chang Lee, "Design of Low latency on-chip communication based on hybrid NoC Architecture," in Proc. of IEEE Intl. NEWCAS Conf., Montreal, Canada, June 2010, pp. 257-260.

154. Chia-Ping Shen, Wei-Hsin Chen, Jia-Ming Chen, Kai-Ping Hsu, Jeng-Wei Lin, Ming-Jang Chiu, Chi-Huang Chen, Feipei Lai, "Bio-Signal Analysis System Design with Support Vector Machines Based on Cloud Computing Service Architecture," 32nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, August 31 - September 4, 2010, Buenos Aires, Argentina.

155. Sheau-Ling Hsieh, Yung-Ching Weng, Chi-Huang Chen, Kai-Ping Hsu, Jeng-Wei Lin, Feipei Lai, "Web-Based Healthcare Hand Drawing Management System," 32nd Annual

International Conference of the IEEE Engineering in Medicine and Biology Society, August 31 - September 4, 2010, Buenos Aires, Argentina.

156. Chi-Huang Chen, Sheau-Ling Hsieh, Yung-Ching Weng, Wen-Yung Chang, Feipei Lai, "Semantic Similarity Measure in Biomedical Domain Leverage Web Search Engine," 32nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, August 31 - September 4, 2010, Buenos Aires, Argentina.

157. Pei Hsuan Wu, Chi-Huang Chen, Huai-Te Chen, Che-Hsuan Shu, Feng-Sheng Lin, Yi-Van Wang, Hao-Jhun Li, Yuan-Ting Wu, Feipei Lai, "User Inspection of National Taiwan University's Telehealth Care System," 32nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, August 31 - September 4, 2010, Buenos Aires, Argentina.

158. Kuo-Chang Ting, Fang-Chang Kuo, Bor-Jiunn Hwang, Hwang-Cheng Wang, and Feipei Lai, "An accurate power analysis model based on MAC layer for the DCF of 802.11n," The 2010 IEEE International Symposium on Parallel and Distributed Processing with Applications, Sept. 6 – 9, 2010, Taipei, Taiwan.

159. Yi-Ju Tseng, Yee-Chun Chen, Hui-Chi Lin, Jung-Hsuan Wu, Ming-Yuan Chen and Feipei Lai, "A web-based hospital-acquired infection surveillance information system," The 10th IEEE International Conference on Information Technology and Applications in Biomedicine, Corfu, Greece, November 2-5, 2010

160. I-Jui Tung, Kam-Tou Sio, Chin-Hung Peng, and Feipei Lai, "A SystemC Content Addressable Memory Power Estimation Tool for Early Design Verification," 2010 Asia Pacific Conference on Circuits and Systems (APCCAS 2010), December 6-9, 2010, Kuala Lumpur, Malaysia.

161. Kam-Tou Sio, Feipei Lai, and Chin-Hung Peng, "CAM Puzzle: A Power Model and Function-Based Circuit Segment Method of Content Addressable Memory," 2010 Asia Pacific Conference on Circuits and Systems (APCCAS 2010), December 6-9, 2010, Kuala Lumpur, Malaysia.

162. Kuan-Ju Chen, Chin-Hung Peng, and Feipei Lai, "Star-Type Architecture with Low Transmission Latency for a 2D Mesh NOC," 2010 Asia Pacific Conference on Circuits and Systems (APCCAS 2010), December 6-9, 2010, Kuala Lumpur, Malaysia.

163. Cheng-Hao Chan, Kun-Lin Tsai, Feipei Lai, and Shun-Hung Tsai, "A Priority Based Output Arbiter for NoC Router", The 2011 IEEE International Symposium on Circuits and Systems, Rio de Janeiro, Brazil, 15-18 May 2011.

164. Wei-Hsin Chen, Feipei Lai, "A Reliable Password-based User Authentication Scheme for Web-based Human Genome Database System," The 5th 2011 IEEE International Conference on Digital Ecosystems and Technologies (IEEE DEST 2011), Deajeon, Korea, 31st May 2011-3rd June 2011.

165. En-Chi Chang, Kuo-Hsuan Huang, An-Bang Lu, Feipei Lai, "Enterprise Digital Rights Management System based on Smart Card," The 15th IEEE Symposium on Consumer

Electronics, June 14-17, 2011, Singapore.

166. Zhuo-Rong Li, En-Chi Chang, Kuo-Hsuan Huang, Feipei Lai, "A Secure Electronic Medical Record Sharing Mechanism in the Cloud Computing Platform," The 15th IEEE Symposium on Consumer Electronics, June 14-17, 2011, Singapore.

167. Ruei-chi Shen, Chin-Hung Peng, and Feipei Lai, "An Early Design Estimation Approach to Synthesize the Low-Power Pre-Computation-Based Content Addressable Memory," IEEE Conference on Open System, 25-28 September 2011, Langkawi, Malaysia.

168. Xiao-Ou Ping, Ja-Der Liang, Yi-Ju Tseng, Pei-Ming Yang, Guan-Tarn Huang, and Feipei Lai, "The methodology for handling missing data during development of predictive model," The Second AMA-IEEE Medical Technology Conference on Individualized Healthcare, Boston, MA. USA, Oct. 16-18, 2011.

169. Li-Chin Chen, Hao-Chun Li, Yi-Van Wang, Huang-Jen Chen, Chung-Ching Shih, Lee-Ming Chuang, and Feipei Lai, "Workflow-Structured Modeling for HIV Disease Control and Management Information System," The Second AMA-IEEE Medical Technology Conference on Individualized Healthcare, Boston, MA. USA, Oct. 16-18, 2011.

170. Yi-Ju Tseng, Selina YF Lee, Xiao-Ou Ping and Feipei Lai, "Describing Electronic Medical Record by Semantic Web Technology," The Second AMA-IEEE Medical Technology Conference on Individualized Healthcare, Boston, MA. USA, Oct. 16-18, 2011.

171. Ya-Lin Wu, Xiao-Ou Ping, Ja-Der Liang, Yi-Ju Tseng, Ching-Wei Hsu, Pei-Ming Yang, Guan-Tarn Huang, and Feipei Lai, "A Method for Identifying Confidence Level of the Extracted Results from Medical Narrative Reports: A Case Study Focuses on the Patients with Liver Cancer ," The Second AMA-IEEE Medical Technology Conference on Individualized Healthcare, Boston, MA. USA, Oct. 16-18, 2011.

172. Ching-Wei Hsu, Xiao-Ou Ping, Ja-Der Liang, Yi-Ju Tseng, Ya-Lin Wu, Pei-Ming Yang, Guan-Tarn Huang, Yufang Chung, and Feipei Lai, "A CBR-based method for retrieving similar patients from case base," The Second AMA-IEEE Medical Technology Conference on Individualized Healthcare, Boston, MA. USA, Oct. 16-18, 2011.

173. Yuan-Ting Wu, Pei-Chun Lin, Feng-Seng Lin, Hani Ousamah Jamleh, Chia-Ping Shen, Shih-Ting Liu, Jin-Ming Wu, Charlie Chen Chung-Ping, and Feipei Lai, "Online Mobile ECG Measurement and Diagnosis with Cloud Computation," The Second AMA-IEEE Medical Technology Conference on Individualized Healthcare, Boston, MA. USA, Oct. 16-18, 2011.

174. Chia-Ping Shen, Chih-Min Chan, Feng-Sheng Lin, Ming-Jang Chiu, Jeng-Wei Lin, Jui-Hung Kao, Chung-Ping Chen and Feipei Lai, "Epileptic Seizure Detection for Multichannel EEG Signals with Support Vector Machines," 11<sup>th</sup> IEEE International Conference on Bioinformatics and Bioengineering, Oct. 24-26, 2011, Taichung, Taiwan.

175. Hsin-Tsung Peng, Chi-Fang Chang, Szu-Lang Liao, Ming-Yang Kao, Feipei Lai and Jan-Ming Ho, "The Development of a Real-time Valuation Service of Financial Derivatives," IEEE Computational Intelligence for Financial Engineering & Economics 2012, March 29-30, New York City, NY, USA.

176. Mu-Hsing Kuo, Andre Kushniruk, Elizabeth Borycki, Feipei Lai, Sarangerel Dorjgochoo, Erdenebaatar Altangerel and Chinburen Jigjidsuren, "A Cloud Computing Based Platform for Sharing Healthcare Research Information," IEEE&ACM The 2012 International Conference on Collaboration Technologies and Systems, May 21-25, Denver, Colorado, USA.
177. Wei-Hsin Chen, Han-Ping Chen, Yi-Ju Tseng, Kai-Ping Hsu, Sheau-Ling Hsieh, Yin-Hsiu Chien, Wuh-Liang Hwu, Feipei Lai, "Newborn Screening for Phenylketonuria: Machine Learning vs Clinicians," International Symposium on Network Enabled Health Informatics, Biomedicine and Bioinformatics HI-BI-BI 2012, 27-28 August, 2012, Kadir Has University, Istanbul, Turkey.
178. Chia-Ping Shen, Chia-Hung Liu, Feng-Sheng Lin, Han Lin, Chi-Ying F. Huang, Cheng-Yan Kao, Feipei Lai, Jeng-Wei Lin, "A Multiclass Classification Tool Using Cloud Computing Architecture," International Symposium on Network Enabled Health Informatics, Biomedicine and Bioinformatics HI-BI-BI 2012, 27-28 August, 2012, Kadir Has University, Istanbul, Turkey.
179. Jui-Hung Kao, Feipei Lai, Wei-Zen Sun, Chia-Ping Shen, Huei-Ming Ma, Jin-Ming Wu, Meng-Yu Chiu, Horng-Twu Liaw, Kai-Chieh Hsu, Yan-Yu Lam and Shih-Ching Cheng, "A web-based medical emergency guiding system," International Symposium on Network Enabled Health Informatics, Biomedicine and Bioinformatics HI-BI-BI 2012, 27-28 August, 2012, Kadir Has University, Istanbul, Turkey.
180. Feipei Lai, Pei-chun Lin, Chia-ping Shen, Jui-hung Kao, Jin-ming Wu, Shih-ting Liu, Weizhi Zhou, Hani Ousamah Jamleh, Chung-ping Charlie Chen, "Telecare with Integrated Health Portal and Smart Phones," Medicine 2.0'12, 5th World Congress on Social Media, Mobile Apps, and Internet/Web 2.0 in Medicine and public health, Sept. 15-16, 2012, Boston, USA.
181. Yan-Yu Andy Lam, Chia-Ping Shen, Yu-Sheng Lin, Huang-Jen Chen, Ai-Chieh Chen, Ling-Chun Cheng, Tsen-Fang Tsai, Chun-Ta Huang, Lee-Ming Chuang, and Feipei Lai, "Continuous, Personalized Healthcare Integrated Platform," IEEE TENCON, November 19-22 2012, Cebu, Philippines.
182. Yi-Ju Tseng, Jung-Hsuan Wu, Hui-Chi Lin, Hsiang-Ju Chiu, Bo-Chiang Huang, Rung-Ji Shang, Ming-Yuan Chen, Wei-Hsin Chen, Huai-Te Chen, Feipei Lai, and Yee-Chun Chen, "Rule-based Healthcare-associated Bloodstream Infection Classification and Surveillance System," Engineering and Medical Informatics and the European Federation of Medical Informatics (EFMI), special topic conference (STC) "Data and Knowledge for Medical Decision Support" , April 17-19, Prague, Czech.
183. Huai-Te Chen, Mei-hui Tseng, Lu Lu, Jheng-Yi Sie, Yu-Jyuan Chen, Yufang Chung, and Feipei Lai, "Cloud Computing-Based Smart Home-Based Rehabilitation Nursing System for Early Intervention," 2013 International Conference on Internet Services Technology and Information Engineering (ISTIE 2013), Bogor, Indonesia, May 10-11.
184. Feng-Sheng Lin, Chia-Ping Shen, Hsiao-Ya Sung, Yan-Yu Andy Lam, Jeng-Wei Lin, and



Feipei Lai, “ A High Performance Cloud Computing Platform for mRNA Analysis,” the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13,) Osaka, Japan, July 3-7, 2013.

185. Chia-Ping Shen, Weizhi Zhou, Feng-Sheng Lin, Hsiao-Ya Sung, Yan-Yu Andy Lam, Wei Chen, Jeng-Wei Lin, Ming-Kai Pan, Ming-Jang Chiu, and Feipei Lai, “Epilepsy Analytic System with Cloud Computing,” the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13,) Osaka, Japan, July 3-7, 2013.

186. Ming-Hsien Hiesh, Yan-Yu Andy Lam, Chia-Ping Shen, Wei Chen, Feng-Sheng Lin, Hsiao-Ya Sung, Jeng-Wei Lin, Ming-Jang Chiu, and Feipei Lai, “Classification of Schizophrenia using Genetic Algorithm-Support Vector Machine (GA-SVM),” the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13,) Osaka, Japan, July 3-7, 2013.

#### Book Chapter:

1. Yung-Ching Weng, Sheau-Ling Hsieh, Kai-Ping Hsu, Chi-Huang Chen, Po Hsun Cheng and Feipei Lai, “A Dynamic Healthcare Portal Design and Enhancements,” Web Intelligence and Intelligent Agents, Zeeshan-ul-hassan Usmani PhD (Ed.), ISBN: 978-953-7619-85-5, INTECH, 2010.

2. Po-Hsun Cheng, Sheau-Ling Hsieh, Tsan-Nan Chien, Ying-Pei Chen, Mei-Ju Su, Yung-Chien Weng, Sao-Jie Chen, Feipei Lai and Jin-Shin Lai, Understanding Discrepancy: A Conceptual Persistent Healthcare Quality Improvement Process for Software Development Management, Process Management, Maria Pomffyova (Ed.), ISBN: 978-953-307-085-8, INTECH, 2010.

3. Hsin-Lu Chang, Michael J. Shaw, and Feipei Lai, “Service Systems as Digital Products,” *Digital Product Management, Technology and Practice: Interdisciplinary Perspectives*, edited by Troy J. Strader, IGI Global, 2011.