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Citizenship: U.S.A.

EDUCATION

- **Ph.D.** in **Computer Science**, University of Wyoming, Laramie, Wyoming, August 1991
- **M.S.** in **Computer Science**, University of Wyoming, Laramie, Wyoming, December, 1988
- **B.S.** with Honor in **Computer Information Science**, Kentucky State University, Frankfort, Kentucky, May 1984

EXPERIENCE at South Dakota State University

- **Professor & graduate coordinator, EE and Computer Science Department** at SDSU, 2001
- **Associate Professor (Tenured)** in Computer Science Department at SDSU, 1996
- **Assistant Professor** in Computer Science Department at SDSU since August 15, 1991

EXPERIENCE for other institutions

- **Invited Visiting Professor**, School of Computing, Soongsil University, Korea, 2014
- **Invited Visiting Professor**, School of Computer Sci. & Engineering, Seoul National University, 2007
- **ASEE Summer Faculty Fellowship** at NASA JSC, summer, 2001 & 2000
- **Visiting Scientist** at NASA JSC, fall, 1999
- **Visiting Scientist** at EROS Data Center, May of 1993
- **Senior Teaching Assistant**, University of Wyoming, 1987 – 1991

RESERCH INTEREST

- Medical Image Processing for Cancer Detection, Telemedicine, Precision Agriculture, and Software Fault Tolerance

LIST OF GRANTS OBTAINED (Total over 2,500,000)

- Development of Anatomical EM Modeling Algorithms based on Medical Images, Pilot Study, from ETRI (Electronics and Telecommunication Research Institute), **\$90,000**, March 2016-2018
“*Development of the anatomical EM models from MRI based on various medical image processing algorithms such as image classification, image segmentation and computer graphic techniques.*”
- Micro Tomography Breast Cancer Image Processing from ETRI, **\$500,000**, 2011-2016

“Development of DSS (Decision Support System) which provide preliminary information to support radiologists in making a final diagnostic decision. The first step is to study the pre-processing module (digitization, extraction), analysis and assessment of MT image data, and ROIs (Regions of interest) specification, and segmentation algorithm. The second step is to find co-related attributes with CT, MRI and Ultrasound information which are in a chronically archived database.”

Publications produced: 2) – 21)

- Intelligent Breast Cancer Image Research Project, Pilot Study, from **CNU \$45,000**, 2010- 2011
“Feasibility study of the image co-related model between MRI, CT, and/or MT”
Publications produced: 22), 23), and 24)
- Intelligent Breast Cancer Image Research Project, Pilot Study, from **CNU \$25,000**, 2009- 2010
“Feasibility study of medical image processing techniques and assessment of MT image data. Existing Computer Added Detection and Diagnosis System.”
Publications produced: 26), 27), and 29)
- Network flow Based Optimization projects in various network environments from **NSF, \$200,000**, 2007-2010
“To seek the solid theoretical and practical foundations for the two main optimization problems; power optimal wireless communication problem and minimal time evacuation planning problem.”
Publications produced: 31), 32, 35), 36), 38) and 39)
- ABET & ABEEK Accreditation Comparison Project, from **Korean Government, \$80,000**, 2007, *“Evaluation of the Engineering and Technology Accreditation systems based on the comparison between ABET (US) and ABEEK (Korea)”*
- SDView Project grant from **USGS** for SDSU, **\$51,000**, 2007-2008
“Building Partnerships and Infrastructure in South Dakota to Facilitate the Availability, Timely Distribution and Utilization of Remote Sensing and Associated Geospatial Data and Technology”
Publications produced: 33), 34), 43), 49), 50), 51), and 60)
- SDView Project grant from **USGS** for SDSU, **\$89,500**, 2006-2007
- SDView Project grant from **USGS** for SDSU, **\$89,500**, 2005-2006
- SDView Project grant from **USGS** for SDSU, **\$89,500**, 2004-2005
- SDView Project grant from **USGS** for SDSU, **\$92,400**, 2003-2004
- SDView Project grant from **USGS** for SDSU, **\$93,700**, 2002-2004
- Governor Round’s SE Course Redesign Grant from SD Governor’s Office, **\$30,847**, 2003
- CEVP project grant from **NASA JSC** for University of Wyoming, **\$73,400**, 1999-2002
- Neural Network Research Project of SDSU from **NSF, \$100,000**, 1999-2000
- Imaging and Modeling of Coupled Environmental Processing (**GIS** Application) from NSF-EPSCoR, **\$934,111**, 1995-1998
- Infomodular CASE, **\$38,000**, funded by **Asymetrix** Bellevue, WA, 1993
- Database Management Development Grant, **\$13,200**, funded by **Dakota Manufacturing Company**, 1993
- Excelelator/IS Academic Grant, **\$20,000** funded by **Index Technology Corporation**, 1991

LIST OF GRANTS SUBMITTED OR IN PROGRESS

- Exploring Patient Case Similarity with New Microwave Tomography Imaging in Breast Cancer Diagnosis Decision Support System, NIH, \$275,000, October 2015 – submitted
- CDS&E: Novel Simulation and Modeling that Facilitate Organic Solar Cell Development, NSF, \$280,000, November 2015 – submitted
- Cancer Detection with Molecular Analysis, collaborating with University of Louisville Hospital, and plan to submit R01 to NIH in 2016
- Bioinformatics, collaborating with a faculty in CS at University of Louisville, and plan to submit one to NSF in 2016
- Development of Cancer Detection Mobile App, Plan to submit a proposal Sanford Hospital and SD government in 2016
- Breast Cancer Detection Algorithm, collaborating with a professor at Mayo Clinic in Minnesota, and plan to submit a proposal to NIH (AREA, Academic Research Enhancement Award) in 2016
- Precision Agriculture, collaborating with SST Co. in Oklahoma, and plan to submit a proposal to USDA in 2016

SERVICE EXPERIENCE

- **Elected Chair**, ACM-SIGAPP, July 2009 – June 2015
- **Editor in Chief**, ACM ACR Newsletter, 2010 – present
- **ABET/CAC Evaluator**, 2004 – Present
- **Associate Editor**, Journal of Computing Science and Engineering, Korea, 2007 – present
- **Editorial Board**, INFORMATION Journal, 2002 – present
- **Editorial Board**, KSII, Transactions on Internet and Information Systems, 2009 – present
- **Elected Vice-Chair**, ACM-SIGAPP, July 2005- June 2009
- **Permanent Steering Committee Member**, ACM SAC International Symposium, 2010-present
- **Conference Chair**, ACM SAC International Symposium, 2010
- **Conference Chair**, ACM SAC International Symposium, 2009
- **Publicity Chair**, ACM SAC International Symposium, 2008
- **Conference Co-Chair**, ACM SAC International Symposium, 2007
- **Steering Committee Chair**, ACM RACs, 2010 – Present
- **Steering Committee Chair**, CTIC, 2006 & 2007
- **Track Chair**, ACM SAC 2005 – 2010, Software Engineering Track, 2005
- **Chair**, South Dakota State University Program Design Competition, 2004-Present
- **Conference Chair** of , 15th, 16th and 17th ISCA International Conference on Computers and Their Applications, 200, 2001, and 2002
- **Conference Chair** of SNPD00 ACIS/IEEE International Conference on Software Engineering and Distributed System, at University of Reims, France, May, 2000
- **Editorial Board Member** of the Journal of Association of Computer Info. Science, 1994-1998
- **Guest Editor** of the JISE SCI, 2007, 2008, and 2009
- **Guest Editor** of the INFORMATION Journal, January, 2002 and July, 2003
- **Founder Senior Editor** of the International Journal of Computer Science and Information, 1994–2000

- **Editor of Computer Science Group** for International Conference of AoM, 1994-1998
- **Editorial Board Member** of Global Information Systems, 1995-1998
- **International Program Committee member of ISCA**, 1996-2004
- **International Program Committee member** of Fourth International Conference on Computer Communications and Networks Sponsored by USC, SRI International, and IEEE, 1995
- **International Program Committee member** of 4th International Conference on Information and Knowledge Management Sponsored by USC, SRI International, and IEEE, 1995
- **International Program Committee member** of 3rd ACM International Workshop on Advanced in GIS, Sponsored IEEE, 1995
- **Advisor**, ACM Computer Club, SDSU, 1994 – 2006
- **Advisor**, South Dakota State University Korean Club, 1991-1996
- **Judge** of ACM International Collegiate Programming Contest, 1990, 1994, 1995, 1997, 1998, And 1999
- **Coach** of ACM International Collegiate Programming Contest, 1990, 1994, 1995, 1997, 1998, and 1999, and **Advanced to World Final** in 1998 and 1999
- **Board member of Kid's Voting Committee** for the City of Brookings, 1993-1999

AWARDS

- Award for Global Engagement in International Research in 2013
- Marquis Who's Who in Mathematics and Information Technology, 2011
- ACM SIGAPP Distinguished Service Award, 2010, Switzerland, 2010
- Outstanding Leadership Award (2+2 Programs with Korean Universities), EECS Department, SDSU, 2010
- Best paper Award at the 9th World Multi-Conference on Systemic, Cybernetics, and Informatics, Orlando, Florida, July 2005
- Marquis Who's Who in Science and Engineering, 1999, 2000, 2001, 2002, and 2003
- Best Paper Award at the 2003 MMBA Conference in Chicago, 2003
- Meritorious Service to the AoM/Iaom for the 15th Annual International Conference, Montreal, Canada, 1997
- International WHO's WHO of Professionals, 1997
- Nominee of the teacher of the year for the College of Engineering at SDSU, 1995, 1996
- Who's Who Among America's Teachers, 1994
- NASA Summer Research Fellow Award at EROS, 1993
- SDSU Faculty Research Support Award, 1992
- Ellbogen Outstanding Classroom Teaching Award, University of Wyoming, 1991
- Wyoming Governor's Award for International Education, 1988

REFEREE:

- NASA, NSF Grant Proposal
- Annual ACM Symposium of Applied Computing, IEEE, ACM, Springer Lecture Notes

- ACM SAC International Symposium, 2005 – present
- ACM RACs, 2010 and 2011
- International CTIC Conference, 2005 – 2009
- Journal of Systems and Software, International Symposium of CAINE, International Conference of IRMA
- IEEE International Parallel Processing Symposium, IEEE Trans. on Software Engineering,
- International Journal of Management, International Conference of AOM/IAOM, IEEE/CSIM Conferences
- C3 Conference and ISCA CATA, 13th, 14th, 16th, 17th, 18th, 19th, and 20th Conferences

Publications: REFEREED PUBLICATIONS

Over 130 peer reviewed journal/conference papers have been published.

1. Ravi Kasaudhan, **Sung Y. Shin**, Soon Ik Jeon, and Seong Ho Son, “Similarity Measurement with Combination of Mesh Distance Fourier Transform and Global Features in 2D Binary Image,” Proceedings of the 2016 ACM SAC conference, Pisa, Italy. pp2176-2181
2. Chulwoo Pack, Sung Shin, Hyung Do Choi, Soon Ik Jeon, and John Kim “Optimizer Multilayer Perceptron Using Dynamic Learning Rate Based Microwave Tomography Breast Cancer Screening,” Proceedings of the 2016 ACM SAC conference, pp. 2171-2175, Pisa, Italy.
3. Austin Hanson, George Hamer, **Sung Shin**, “Design and Development of Hybrid Model for Object Orientation Classification,” accepted to the ACM ACR (Applied Computing Review)
4. Chulwoo Pack, Samaneh Aminikhanghahi, **Sung Shin**, Soon Ik Jeon and Seong Ho Son, “An Optimized Fuzzy Support Vector Machine Classifier using Breast Mammogram Tomography: Trade-off between Specificity and Sensitivity,” International Journal of Distributed Sensor Networks (SCIE), Vol.18, No.9, September 2015, PP3979-3988
5. C. Pack, **S. Shin**, Soon Ik Jeon and Seong Ho So, “Computer Aided Breast Cancer Diagnosis System with Fuzzy Multiple Parameter Support Vector Machine, 2015 ACM RACs, Research in Adaptive and Convergent Systems, Prague, Czech, October 9-12, 2015
6. Austin Hanson, George Hamer, **Sung Shin**, “Hybrid Model for Object Orientation Classification,” 2015 ACM RACs, Research in Adaptive and Convergent Systems, Prague, Czech, October 9-12, 2015
7. S. GC, **S. Shin**, C. Pack, Hyung Do Cho, “Variability Measurement for Breast Cancer Classification of Mammographic Masses,” 2015 ACM RACs, Research in Adaptive and Convergent Systems, Prague, Czech, October 9-12, 2015

8. Samaneh Aminikhanghahi, **Sung Shin**, Wei Wang, Soon I. Jeon, Seong H. Son, and Chulwoo Pack, "Study of Wireless Mammography Image Transmission Impacts on Robust Cyber-Aided Diagnosis Systems, in print 2015 ACM SAC conference, Salamanca, Spain
9. Yao, Wei Wang, **Sung Shin**, Seong H. Son, and Soon I Jeon, "Competition-Based Device-to-Device Transmission Scheduling to Support Wireless Cloud Multimedia Communications, "International Journal of Distributed Sensor Networks, vol. 2014, Article ID 869514, 7 pages, 2014.doi: 10.1155 /2014 /869514
10. Wei Wang, Genshang Zhang, **Sung Shin**, Carrie Hruska and Seong H. Son, "Fourier irregularity index: A new approach to measure tumor mass irregularity in breast mammogram images," Springer Science, 2014
11. Byungkwan Jung, **Sung Shin**, Wei Wang, Hyung D. Choi, and Jung K. Pack, "Similar MRI Object Retrieval Based on Modified Contour to Centroid Triangulation with Arc Difference Rate with Arc Deference Rate," 2014 ACM SAC conference, Gyeongju, Korea, March, 2014, pp. 31-33
12. Samaneh Aminikhanghahi, Wei Wang, **Sung Shin**, Seong H. Son, and Soon I. Jeon, "Effective Tumor Feature Extraction for Smart Phone based Microwave Tomography Breast Cancer Screening," 2014 ACM SAC conference, Gyeongju, Korea, March, 2014, pp. 674-679
13. Samaneh Aminikhanghahi, Wei Wang, **Sung Shin**, Seong H. Son, and Soon I. Jeon, "An Optimized Support Vector Machine Classifier to Extract Abnormal Features from Breast Microwave Tomography Data," 2014 ACM RACs conference, Towson, MD, October, 2014, pp. 111-115
14. Byungkwan Jung, **Sung Shin**, Seong H. Son and Jung K Pack, "Shape based Medical Image Retrieval Method Using Irregularity Chain Code Similarity," 2014 ACM RACs conference, Towson, MD, October, 2014, pp. 121-125
15. Chunqiu Wang, Wei Wang, Sung Shin, Soon I. Jeon, "Comparative Study of Microwave Tomography Segmentation Techniques Based on GMM and KNN in Breast Cancer Detection," 2014 ACM RACs conference, Towson, MD, October, 2014, pp. 303- 308
16. Hyun I. Kim, **Sung Shin**, Wei Wang and Soon I. Jeon, "SVM based Harris Corner Detection for Breast Mammogram Image Normal/Abnormal Classification," in Proc. ACM Research in Adaptive and Reliable Systems (RACS), pp.187-191, October 2013
17. Zhe Li, Wei Wang, **Sung Shin** and Hung D. Choi, "Enhanced Roughness Index for Breast Cancer Benign/Malignant Measurement Using Gaussian Mixture Model," in Proc. ACM Research in Adaptive and Reliable Systems (RACS), pp.177-186, October 2013.

18. Byung K. Jung, Wei Wang, **Sung Y. Shin**, Hyung Do Choi and Jungki Pack, "A Sequential Feature Filtering Approach for Breast Magnetic Resonance Image Similarity Study," *INFORMATION Journal*, Vol.16, No.8, pp. 6259-6268, August 2013
19. Hyun I. Kim, **Sung Y. Shin**, Wei Wang, Soonik Jeon and Sungho Son, "Similarity Measurement for Breast Medical Image Retrieval System with Hybrid Object Based Approach," *INFORMATION Journal*, Vol.16, No.8, pp. 6269-6278, August 2013
20. Minwoo Jang, Joongjin Kook, Samin Ryu, Kahyun Lee, **Sung Shin**, Ahreum Kim and Youngsoo Park, "An Efficient Similarity Comparison Based on Core API Calls," in proceedings of ACM SAC 2013, pp. 1634 – 1638 , Portugal, March 2013
21. Donghoon Kang, **Sung Y. Shin**, Chang Oan Sung, Jung Y. Kim, Jeongki Pack, Hyung Do Choi, "Improved Methods of Segmentation and Object Extraction With Breast MRI Images," *INFORMATION Journal*, Vol.15, No.7, pp. 2727-2736, July 2012
22. Jucheol Moon, **Sung Y. Shin**, Donghoon Kang, Soon Ik Jeon, Hyung Do Choi, Jung Y. Kim, "Extracting Breast Cancer Features in Medical Images and Generating Its Parametric Pattern," *INFORMATION Journal*, Vol.15, No.7, pp. 2737-2746, July 2012
23. Joonhyouk Jang, Jinman Jung, Yookun Cho, Sanghoon Choi, **Sung Y. Shin**, "Design of a Light weight TCP/IP Protocol Stack with an Event-Driven Scheduler," *Journal of Information Science and Engineering*, Vol. 28, No 6, pp. 1059-1071, November 2012
24. Eungyu Lee, Joonwoo Lee, Hyeongseok Kang, Kanghee Kim, Sung-Ryul Kim and **Sung Y. Shin**, "An Implementation Study of a Ghost Drive: Hidden File Store in a File System," in proceedings of ACM SAC 2012, pp. 2796- 1798, Italy, March 2012
25. Zhe Li, **Sung Y. Shin**, Soon I. Jeon, Seong H. Son, Jeong K. Pack, "A New Histogram-Based Cancer Image Classifier Using Gaussian Mixture Model," in Proc. ACM Research in Applied Computation Symposium (RACS), pp.143-147, October 2012.
26. Genshang Zhang, **Sung Y. Shin**, Wei Wang, Carrie Hruska, Hyung D. Choi, "A New Fourier-Based Approach to Measure Irregularity of Breast Cancer Masses in Mammograms," in Proc. ACM Research in Applied Computation Symposium (RACS), pp. 153-157, October 2012.
27. Kang, Wang, Park, Xing, Shin, "NS-2 Based Wireless Vehicular Network Performance Study with High Speed Urban Mobile Relays," in proceedings of SON and RAHMCC, ICST International Conference on Communications and Networking in China, pp. 123-126, August, 2012

28. Jucheol Moon, **Sung Y. Shin**, Dooghoon Kang, Soonik Jeon, Huyng Do Choi, and Jung Y Kim, “Agglomerated Feature Extraction in Medical Images for Breast Cancer and Its Characteristic Pattern Generation,” in Proc. ACM Research in Applied Computation Symposium (RACS), pp. 220-226, Nov. 2011.
29. Dooghoon Kang, **Sung Y. Shin**, Chang Oan Sung, Jung Y. Skim, Jeong-Ki Pack and Hyung-Do Choi, “An Improved Method of Breast MRI Segmentation with Simplified K-means Clustered Images,” in Proc. ACM Research in Applied Computation Symposium (RACS), pp. 226-231, Nov. 2011.
30. WookHwan Choi, Junghoon Shin, Sangjun Lee and **Sung Y. Shin** “Efficient and Flexible Key/Value Data store System using Java Reflection,” INFORMATION Journal, pp. 1565-1578, Vol.14, No.4, May, 2011
31. Manki Min, Austin F. O’Brien, and **Sung Y. Shin**, “Improved PSOR algorithm for minimum power multicast tree problem in wireless ad hoc networks,” International Journal of Sensor Networks, Index science Publishers, Vol. 8, No.3/4 (2010), pp. 193–201.
32. Ju-Hwan Kim, Jong Wook Kwak, Soomi Yang, **Sung Y. Shin**, Chu Shik Jhon, “Branch Pre-Prediction: A Method for Hiding Branch Prediction Latency”, INFORMATION Journal, Vol.13, No.2, March, 2010
33. Wei Wang and **Sung Y. Shin**, “A New Green Scheduling Approach to Maximize Wireless Multimedia Networking Lifetime via Packet and Path Diversity,” Springer Birkhauser, ISBN:978-3-0348-0031-0, pp. 167-180, 2010
34. Wookhwan Choi, Junghoon Shin, Sangjun Lee, and **Sung Y. Shin**, “Design and Implementation of a Key/Value Distributed Data Store System using Java Reflection,” Proceedings of ACM CTIC 2010 International Conference on Convergence Technology and Information Convergence, Atlanta, GA, October, 2010, pp. 15-18
35. Junghoon Lee, Gyung-Leen Park, Sang-Wook Kim, Hye-Jin Kim and **Sung Y Shin**, “Failure Management Development for Integrated Automotive Safety-Critical Software Systems,” ACM SAC 2010, pp. 189-193, Switzerland, March 2010
36. Eric Bauer, **Sung Y. Shin**, Hyung Do Choi, “Comparison of 2D Affine Transforms on GUI Platforms,” Proceedings of ACM CTIC 2009, International Conference on Convergence Technology and Information Convergence, Atlanta, GA, October, 2009, pp. 157-163
37. Hakin Kimm, **Sung Y. Shin**, Ho-Sang Ham, and Chang Oan Sung, “Failure Management Development for Integrated Automotive Safety-Critical Software Systems,” ACM SAC 2009, pp. 517-521, Hawaii, March 2009

38. **Sung Y. Shin**, Manki Min, Sangjun Park, and Austin O'Brien, "Improved Simulation Comparisons of Capacity Route Planner Algorithms," *INFORMATION Journal*, Vol.12, No.4. 2009, pp. 819-826
39. **Sung Y. Shin**, Hyungbae Park, Jiman Hong, and Haklin Kimm, "Development of Fault Tolerant Linux Kernel 2.6 with Backward Error Recovery," *INFORMATION Journal*, Vol.11, No.5. 2008, pp637-648
40. **Sung Y. Shin**, Manki Min, Sangjun Park, and Austin O'Brien, "Comparison of Capacity Route Planner Algorithms," *Proceedings of CTIC 2008, International Conference on Convergence Technology and Information Convergence*, Jeju, Korea, November 2008, pp. 195-199
41. M. Min and A.F. O'Brien and **Sung.Y. Shin**, "SOR revisited: Partitioning and Recovering after Shrinking," *Proceedings of the IEEE International Conference on Computer Communications and Networks*, St. Thomas, USVI, August, 2008
42. Jaeheung Lee, Jungyoung Heo, Yoogun Cho, Jiman Hong, and **Sung Y. Shin**, "Secure Deletion for NAND Flash File System," *ACM SAC 2008*, pp. 1710-1714, Brazil, March, 2008
43. Hong Min, Yoo-Kun Cho, **Sung Y. Shin**, Jiman Hong, "Dynamic memory allocator for sensor operating system design and analysis," accepted for the *JISE, Journal of Information Science and Engineering (SCI Level)*
44. Sang Yon Kim, **Sung Y. Shin**, Jaehyoun Kim, Mi Ryang Kim,"A case study on forming collaborative small groups in Internet-media class," *Proceedings of the 3rd Asia Pacific International Conference on Information Science and Technology*, Cavite State University, Indang, Philippines, December, 2008, pp. 169-174
45. ByeongJu Yun, **Sung Y. Shin**, SungChan Hong, YouSik Hong, Cheonshik," Traffic Accident Analysis using PDA," *Proceedings of the 3rd Asia Pacific International Conference on Information Science and Technology*, Cavite State University, Indang, Philippines, December, 2008, pp. 289 - 300
46. Seok Myun Kwon, Jin Suk Kim and **Sung Y. Shin**, "A Load-balancing Algorithm for Monte Carlo Simulations in Peer to Peer Systems," *Information Journal*, Vol. 10, No.3, pp. 273-278
47. JungHoon Lee, Mikyung Kang, Gyung-Leen Park and Sung Y. Shin, "Design of Reliable Real-Time Policy for Dual-Channel Networks," *Journal of Information Science and Engineering*, Vol. 23, No.5, pp. 12- 17
48. Haklin Kimm, **Sung Shin**, and ChangOan Sung, "Evaluation of Interval-based Dynamic Voltage Scaling Algorithm on Mobile Linux System," *Proceedings of the ACM SAC 2007 International Conference*, Seoul, Korea, pp. 1141-1145, March, 2007

49. JinKwon Oh, Junny Seo, JeongHo Kim, JinSuk Kim and **Sung Shin** "Classification Method of Hub patent using Bibliometric Analysis," Proceedings of CTIC 2006, International Conference on Convergence Technology and information convergence with ACM-SIGAPP, UNLV, pp. 65-71, Nevada, 2006
50. Jongmoo Choi, Seungjae Baek, and **Sung Y. Shin**, "Design and Implementation of a Kernel Resource Protector for Robustness of Linux Module Programming", *Proceedings of ACM SAC 2006 International Conference*, pp. 1477-1481, Dijon, Franc, April, 2006
51. Haklin Kimm, **Sung Y. Shin**, and Charlie Shim, "Two Approaches to Improve Java MIDP Record Management System in Wireless Devices," Proceedings of 2005 IEEE International Conference on Electro Information Technology, Lincoln, Nebraska, May, 2005
52. Charlie Shim, Jung Y. Kim, **Sung Y. Shin**, and Jiman Hong, "Using Feedback Cycle for Developing an Adjustable Security Design Metric," Lecture Note Computer Science Springer IEEE Joint ICNC'05-FSKD'05 (International Conference on Natural Computation and Fuzzy Systems and knowledge Discovery, Changsha, China, August, 2005.
53. Charlie Shim, **Sung Y. Shin**, and Jung Y. Kim, "A Design Paradigm to Build a Secure System by Adopting Software Reliability and Testing Concepts," Proceedings of the 9th World Multi-Conference on Systemic, Cybernetics, and Informatics, Orlando, Florida, July 2005, Vol. III, pp. 362-367.
54. **Sung Y. Shin**, Charlie Y. Shim, Bong Gun Cho, and Chih-Chen Hung, "Development of a Weighted Security Measure as a Design Metric," International Journal of INFORMATION, 2005 Vol. 8, No. 6, November 2015
55. Haklin Kim and **Sung Y. Shin**, "Efficient Use of Java MIDP Record Management System in Wireless Device" for 2005 IEEE Sarnoff Symposium, pp.18-19 April 2005, Nassau Inn in Princeton, NJ.
56. Junyoung Heo, Sangho Yi, Yoocun Cho, Jiman Hong and **Sung Y. Shin**, "Space-Efficient Page-Level Incremental Checkpoints, Proceedings of the ACM SAC 2005 International Conference, pp. 1558 – 1562, Vol. 2, March, 2005.
57. Dong S. Jang, **Sung Y. Shin**, Charlie Shim, and C.C. Hung, "A Comparison on Information Fusion Method for Air Target Identification," Proceedings of the ACM SAC 2005 International Conference, pp. 45-46, Vol. 1, March, 2005.
58. **Sung Y. Shin**, Chan G. Yoo and C. C. Hung, "*Reliable High-Speed Communication Module for Linux Cluster File System Using M-VIA*," Proceedings of the ISCA-CATA2004, 19th International Conference, pp. 205-208, March 2004.

59. Jiman Hong and **Sung Y. Shin** “Efficient Check Point Interval Placement Based on Memory Usage Profile,” accepted for the special issue of Journal of INFORMATION, Vol. 8, No. 3, May 2005.
60. **Sung Y. Shin**, Su Jeong Byun, Ali Salehnia and Won Don Lee, “Enhanced *User Verification System on Telebanking Using Kernel based PCA*,” Journal of INFORMATION: An International Journal, Vol. 7, No. 1, pp. 123-136, January 2004.
61. **Sung Y. Shin**, Chan G. Yoo and Kwan-Jong Yoo, “Design and Performance Analysis of Communication Module for Linux Clustering VOD Server,” Proceedings of the 16th International ISCS-CAINE2003 Conference, November, 2003, pp. 254-257.
62. **Sung Y. Shin**, Charlie Y Shim, Xiaohong Chen and Chang O. Sung, “A Web-Based Approach for Myfascial Pain Syndrome Patient Monitoring System in the Home” *Proceedings of the 16th International ISCS-CAINE2003 Conference*, November, 2003, pp. 246-249.
63. Sangsu Kim, Jiman Hong, Yookun Cho and **Sung Y. Shin**, “Memory Profiling Checkpoint,” Proceedings of the ISCA-CATA2003, 18th International Conference, March, 2003, pp. 325-328.
64. Moon Ju park, Jiman Hong and **Sung Y. Shin**, A Priority Assignment Method for Earliest Deadline Scheduling,” Proceedings of the ISCA-CATA2003, 18th International Conference, March, 2003, pp. 316-319.
65. Charlie Y. Shim and Ali Salehnia and **Sung Y. Shin**, “Building a Secure E-Commerce System with a Secure Web-Based Data Transfer Model,” Proceedings of 2003 MMBA Conference in Chicago, March 2003.
66. **Sung Y. Shin**, Charlie Yong-Sang Shim and Su-Jung Byun) “Bird Species Identification System Using Kernel Based PCA,” Proceedings of the ISCS-CAINE2002 15th International Conference, November, 2002, pp. 142-145.
67. Charlie Y. Shim, Jung Y Kim, **Sung Y. Shin** and Ali Salehnia, “A Model of Network and Internet Security for Web-Based Database,” Proceedings of 2003 MMBA Conference in Chicago, pp. 123-126, February, 2002.
68. Jin-ki Hong and Rex E. Gantenbein and **Sung Y. Shin**, “Computer-Aided Design Validation of Safety-Critical Software Systems,” ACIS International Journal of Computer and Information Science, vol.1, No. 1, Winter 2000, pp. 11-19.

69. Dong Cheon Lee, Jeong, Woo Kim, **Sung Y. Shin**, “Application of Radiometric Model for Water Resource,” IEEE 2001 International Geosciences and Remote Sensing Symposium (IGARSS 2001), Sydney, Australia, July 2001, pp. 128-132.
70. **Sung Y. Shin**, Sujeong Byun and Won Don Lee, “User Verification System on Telebanking Using Kernel Based PCA,” ISCA-CATA2002 17th International Conference, pp. 102-105, April, 2003.
71. Dong C. Lee and **Sung Y. Shin**, “Radiance Simulation of Multispectral Remote Sensor Data for Water Resource Appliance,” Proceedings of 15th International ISCA CATA2000 Conference, March 2002, pp. 400-403.
72. Rex E. Gantenbein, Thomas L. James, Garrace DeGroot, Harshi L. Allen and **Sung Y. Shin**, “Analyzing Security in Distributed Collaborative Systems,” Proceedings of 15th International ISCA CATA2002 Conference, March 2002, pp. 72-75.
73. Charlie Shim and Ali Salehnia, **Sung Y. Shin**, “An Approach from Software Reliability Modeling to Security Modeling,” Proceedings of the ISCA 17th International Conference, April, 2002, pp 63-66.
74. Charlie Shim, Rex Gantenbein and **Sung Y. Shin**, “Developing a Probabilistic Security Measure Using a Software Reliability Model, International Interdisciplinary Journal INFORMATION, 2001, Vol. 4, Number 4, pp. 409-418.
75. **Sung Y. Shin**, Jung Yun Kim, Rex Gantenbein, and Charles Lundquist “Design A Working Model of Secure Data Transfer Using A Data Mart,” Proceedings of the ISCS-CAINE2000 14th International Conference, November, 2001, pp. 66-69.
76. Chagon Yoo, Chi Jung Hwang and **Sung Y. Shin**, “Real Time Image Matching for Target Searching Using Intensity Transformation,” International Journal of Computers and Their Applications, 2001.
77. Sujeong Byun, Won Don Lee, **Sung Y. Shin** and C.C. Hung, “The Performance Comparison between Back propagation and Extended Incremental Network Model on Speaker Verification,” Proceedings of the ISCS CATA2001 16th International Conference, March, 2001, pp. 256-259.
78. C.C. Hung and **Sung Y. Shin**, “Study on Statistical Measure of Spectral Signature Separability in Unsupervised Training Algorithms,” Proceedings of the ISCA CAINE2000 13th International Conference, November, 2000, pp.189-192.

79. C.C. Hung, Min Shen Yang, **Sung Y. Shin**, and Tommy Coleman, "Evaluation, Fuzzy Login, and Neural Networks in Unsupervised Training Algorithms," Proceedings of the ACIS 1st International Conference on SNPD'00, May 2000, pp. 464-468.
80. **Sung Y. Shin**, Rex E. Gantenbein, Roger Lee, "Design Issues for Developing Secure Object Oriented and Distributed Systems," Proceedings of the ACIS 1st International Conference on SNPD'00, May 2000, pp. 151-155.