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SANG C. SUH

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PROFESSIONAL APPOINTMENTS

- 1992-present: Assistant, Associate, and currently Professor & Head, Department of Computer Science & Information Systems, Texas A&M University-Commerce, U.S.A.
- 1990-1992: Research Associate, Grants from Texas Instruments Systems Lab., Dallas, TX, and Department of Computer Science & Engineering, Southern Methodist University, U.S.A.
- 1989-1990: Instructor, Department of Computer Science & Engineering, Southern Methodist University, U.S.A.

AREAS OF EXPERTISE

- 1) Data/Knowledge Mining
- 2) Data Analytics and Information Visualization
- 3) Cyber Physical Systems
- 4) Human Computer Interfaces and Interaction
- 5) Bio and Human Informatics

PROFESSIONAL PREPARATION

- ✓ Ph.D. Computer Science
Southern Methodist University, Dallas, TX, U.S.A., 1992
- ✓ M.S. Computer Science
University of Hawaii, Honolulu, HI, U.S.A., 1986

EDITOR-in-Chief

2011-2016 **Transactions of SDPS: Journal of Integrated Design and Process Science**,
ISSN: 1092-0617, Abstracted/indexed in: Academic Source Complete, ACM Digital Library, Compendex, CPX, EBSCO database, Science & Technology Collection, SciVerse Scopus, Ulrich's Periodicals Directory, IOS Press,
<http://www.iospress.nl/journal/journal-of-integrated-design-process-science>

AWARDS and FELLOSHIPS

- Excellence in Leadership Award, Society for Design & Process (2010)
- Texas A&M System Faculty Teaching Excellence Award by Students (2010, 2011)
- Outstanding Achievement Award, WorldComp2009 – World Congress on Computer Science, Computer Engineering and Applied Computing (2009)
- Nominated for Minnie Stevens Piper Professor Teaching Award by A&M-Commerce faculty senate (2009)
- Distinguished Service Award, Society for Design & Process Science (1996)
- Texas Instruments Research Fellowship Award (1990-92)
- Graduate Instructor Fellowship Award, Southern Methodist University (1989-90)
- University of Hawaii Software Engineering Research Fellowship Award (1985-86)

REGIONAL/NATIONAL PROFESSIONAL SERVICES

- 2016-Present **Board Member, Society for Design and Process Science.** Established in 1995 at the IC² (Innovation, Creativity, and Capital) Institute, University of Texas at Austin. World organization with 1000+ professional membership, www.sdpsnet.org
- 2012-2015 **President,** Elected in June, 2012. **Society for Design and Process Science.** Established in 1995 at the IC² (Innovation, Creativity, and Capital) Institute, University of Texas at Austin. World organization with 1000+ professional membership, www.sdpsnet.org
- 2010-2012 **Vice President,** Elected in June, 2010. **Society for Design and Process Science.** Established in 1995 at the IC² (Innovation, Creativity, and Capital) Institute, University of Texas at Austin. World organization with 1000+ professional membership, www.sdpsnet.org
- 2009-2012 North Texas Federation Advisory Panel member. Elected as a 3-year term advisory panel member to serve the North Texas Federation for faculty research collaboration and student research enhancement (with University of North Texas and Texas Women's University).
- 1998-Present Member, Eastfield College Technology Advisory Board. Advisory body for Eastfield College's technical curriculum and planning.
- 1998-present Computer Science Committee Member, Federation of North Texas Area Universities.
- 2003-present Treasurer, Computer Science Committee, Federation of North Texas Area Universities.
- 2007 Reviewer, Best Paper Award in Computer Science (Data Analysis and Data Mining), Southern Association of Colleges and Schools.

CONFERENCE SYNERGISTIC ACTIVITIES

CONFERENCE KEYNOTE SPEECH

S. C. Suh, Conference Main **Keynote Speaker**, The 10th International Conference on Computers, Communications and Systems (ICCCS2009), November 6th, Daegu University, Korea.

M. Yang, Jack Yang, **S. Suh**, H. Arabnia “**Plenary Keynote Lecture**: Next Generation Sequence Generation Sequencing Technologies Foster the New Initiatives of High-Performance Computing” In Proceedings of International Joint Conference on Bioinformatics, Systems Biology and Intelligent Computing”. Library of Congress Number 2009904091, ISBN 978-0-7695-3739-9, IEEE Computer Society Order Number P3739, BMS Part Number CFP0935H-PRT, IEEE Press 2009.

M. Yang, Jack Yang, **S. Suh**, and H. Arabnia “World Congress on Computer Science, Computer Engineering and Applied Computing **Keynote Lecture**: The impact of supercomputing in the next generation sequencing data mining” World Congress on Computer Science, Computer Engineering and Applied Computing. July 13-17, 2009 Las Vegas, Nevada, USA. In Proceedings of The 2009 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'09), CSREA Press, 2009.

Sang C. Suh, Invited talk for NSF STEM program at Eastfield College, March 25th, 2009.

CONFERENCE CHAIRMAN

Conference Chairman, SDPS2015, The 20th World Conference on Integrated Design and Process Technology, the Society for Design and Process Science & Software Engineering Society, Fort Worth, TX, Nov. 1-4, 2015.

Conference Chairman, SDPS2014, The 19th World Conference on Integrated Design and Process Technology, the Society for Design and Process Science & Software Engineering Society, Kuching, Malaysia, June 13-17, 2014.

Conference Chairman, SDPS2013, The 18th World Conference on Integrated Design and Process Technology, the Society for Design and Process Science & Software Engineering Society, Sao Paula, Brazil, October 27-31, 2013.

SDPS2012, The 17th World Conference on Integrated Design and Process Technology, the Society for Design and Process Science & Software Engineering Society, Berlin, Germany, June 10-14, 2012.

PROGRAM CHAIRMAN

SDPS2011, The 16th World Conference on Integrated Design and Process Technology, the Society for Design and Process Science & Software Engineering Society, Jeju Island, Korea, June 12-16, 2011.

SDPS2010, The 15th World Conference on Integrated Design and Process Technology, the Society for Design and Process Science & Software Engineering Society, Dallas, Texas, June 1-5, 2010.

SDPS2009, The 14th World Conference on Integrated Design & Process Technology, Society for Design and Process Science, University of Alabama, Montgomery, Alabama, November 1-5, 2009.

GENERAL VICE CHAIR

2012 IIISC& ICCCS, 2012 Joint Conference of The International Industrial Information Systems Conference & The International Conference on Computers, Communications and Systems, December 20-23, 2012, Chiang Mai, Thailand; <http://www.iiisc.org>.

PROGRAM ADVISORY BOARD MEMBER

Advisory Board Member for Program Committee, The 10th International Conference on Computers, Communications and Systems (ICCCS2009), November 6th, Daegu University, Korea.

RESEARCH GRANTS

Co-PI, ETRI (Electronics and Telecommunication Research Institute), Research on Machine Learning Models for Network Traffic Anomaly Analysis, \$48,000 awarded, June 2016- February 2017.

Co-PI, NSF (National Science Foundation), Research on HealthQuest Integrated Biofeedback CDSS Environment for Improving Performance with Case Study in Neurodegenerative Disease, \$797,544 Total UAB-TAMUC [\$318,914 TAMUC subaward] submitted, December 8, 2016.

Co-PI, NSF (National Science Foundation), Research on CPS:Synergy:Automation Framework for Design and Verification Securing Trustworthy IOT Devices, \$1,000,000 Total UAB-TAMUC [\$314,000 TAMUC subaward] submitted, June, 2016.

Co-PI, Sony Award for Sensor Fusion, Research on Sony Rapid Alert System for Enhanced Nightvision (RASEN): http://discover.sony.ca/Research_Program/Files/overview.html, \$150,000, submitted, October 14, 2016.

Co-PI, ETRI (Electronics and Telecommunication Research Institute), Research on Big-Data Computing Platforms for Security Analytics, \$122,000 awarded, June 2013- February 2015.

Co-PI, Sysmate Inc., Research on Network Traffic Classification, its Implementation, and Benchmarking, \$193,723 awarded, September 2012- April 2015.

Co-PI, U.S. Department of Energy Grant: TX-W-20090427-0004-50. Advanced Artificial Science. The development of an artificial science and engineering research infrastructure to

facilitate innovative computational modeling, analysis, and application to interdisciplinary areas of scientific investigation., \$300,000 awarded, 2011- 2012.

Co-PI, NSF TUES – Type 1 Project, “STEM Analysis and Learning Tool (SALT): Assessing and Guiding Future Generation of STEM Fields”, \$182,332, proposed in May, 2012.

Co-PI, U.S. Department of Energy Grant: TX-W-20090427-0004-50. Advanced Artificial Science. The development of an artificial science and engineering research infrastructure to facilitate innovative computational modeling, analysis, and application to interdisciplinary areas of scientific investigation., \$291,600 awarded, 2010- 2011.

Principle Investigator, NSF CE21 (Computing Education for 21st Century), “Planning Grant: Computer Programming Technology Training Center”, \$192,345, proposed in July 2011.

Principle Investigator, NSF IIS SoCS (Social-Computational Systems), “MENTAL GREEN ZONE (MGZ) - An Intelligent and Interactive Application to Improve Mental Health ”, \$480,536, proposed in November, 2011.

Principle Investigator, NSF RET (Research Experience for Teachers), “RET in Engineering and Computer Science Site - Program in Computational Science at Texas A&M University-Commerce”, \$448,143, proposed in October, 2011.

Principle Investigator, NSF CNS-CISE, REU (Research Experience for Undergraduate), “REU Site: Research Experience for Undergraduates for Computational Science”, \$295,425, proposed in August, 2011.

Principle Investigator, NSF IIS SoCS (Social-Computational Systems), “MENTAL GREEN ZONE: An Intelligent and Interactive Application to Improve Mental Health”, \$420,027, proposed in November, 2010.

Principle Investigator, Texas A&M University – Commerce Research Grant, “Robust Data and Visual Analytic Tool for Automatic Information Retrieval from Massive Data Sets”, \$10,666/1yr, Sept. 1, 2009-Aug. 31, 2010.

Co-PI, U.S. Department of Energy Grant: DE-SC0001132, The development of an artificial science and engineering research infrastructure to facilitate innovative computational modeling, analysis, and application to interdisciplinary area of scientific investigation, \$380,000 awarded, 2009- 2010.

Co-Investigator, Texas Instruments Inc., “Knowledge Base Compilation for Real-time Embedded Systems”, Funded under IDEA Program Funding, \$89,100/3yr.

PUBLICATIONS

BOOKS

Sang C. Suh and David Thomas, Eds., *Big Data and Data Analytics*, Springer (Publisher), New York, NY, USA, ISBN TBA, Under Contract, TBP in 2017

Sang C. Suh and Ali Dogru, Eds., *Proceedings of the 19th International conference on Design and Process Sciences (SDPS)*, Kuching, Malaysia, June 2014.

Sang C. Suh, John Tanik, John Carbone, and A. Eroglu, Eds., *Applied Cyber-Physical Systems*, Springer Verlag, New York, NY, USA, ISBN 978-1-4614-7336-7, 253 pages, 2013.

Sang C. Suh, *Practical Applications of Data Mining – Methods and Practices*, Jones and Bartlett Publishers, Boston, MA, USA, (in print), ISBN-13: 9780763785871, January 2011 (Single author book).

Sang C. Suh, Murat Tank, and V. Gurupur, Eds., *Biomedical Engineering – Health Care Systems, Technology and Techniques*, Springer Verlag, New York, NY, USA, ISBN 978-1-4614-0115-5, eISBN 978-1-4614-0116-2, DOI: 10.1007/978-1-4614-0116-2, 2011.

BOOK CHAPTERS

N. M. Sirakov, **Sang C. Suh** and S. Attardo, "Integration of low level and ontology derived features for automatic weapon recognition and identification", *Automatic Target Recognition XXI*, Eds.: Firooz A. Sadjadi and Abhijit Mahalanobis, Proceedings of SPIE Vol. 8049 (SPIE, Bellingham, WA), 80490X. September, 2011.

Sang C. Suh and K. Xiong, *Resource Provisioning in SLA-Based Cluster Computing*, Lecture Notes in Computer Science, Springer Verlag, ISBN-13: 978-3-642-16504-7, pp. 1-17, 2010.

Sang C. Suh and Nagendra Pabbisetty, "Extraction of Meaningful Rules in a Medical Database," *Machine Learning* (Ed. YaGang Zhang), IN-Teh Academic Publishers, Vukovar, Croatia, pp. 411-426, 2010, ISBN: 978-953-307-033-9.

Sang C. Suh and V. Kandula, "A Prospective View on Intelligent Databases," *Intelligent Systems* (Ed. E. A. Yfantis), Kluwer Academic Publishers, Netherlands, 1995, pp. 757-761, ISBN: 0-7923-3421-3.

Sang C. Suh, Murat M. Tanik, and Dennis J. Frailey, "An Efficient Inferencing for Real-Time Expert Systems," *Knowledge-Based Systems and Neural Networks: Techniques and Applications* (Eds. R. Sharda, J.T. Cheung, and W. J. Cochran), Elsevier Science Publishers, N.Y., 1991, pp. 17-28, ISBN: 0-444-01610-4.

JOURNAL PAPERS AND PROCEEDINGS (ALL PEER REVIEWED AND REFEREED)

Jinoh Kim, Alex Sim, **Sang Suh**, Ikkyun Kim, “An Approach to Online Network Monitoring using Clustered Patterns,” Accepted for 2017 International Conference on Computing, Networking and Communications (ICNC), Silicon Valley, CA, January, 2017 (acceptance rate: 29%)

Jung-Gyu Yoon, Neda Zarayeneh, and **Sang C. Suh**, “Interrelationship between the General Characteristics of Korean Stroke Patients and the Variables of the Sexual Functions: Random Forest and Boosting Algorithm”, The Journal of Physical Therapy Science, Accepted for Publication, 2017.

Byeong-Mo Cho, Neda Zarayeneh, and **Sang C. Suh**, “Effects of a Newly Designed Pelvic Belt Orthosis on functional mobility of adults with Post-Stroke Hemiparesis”, The Journal of Physical Therapy Science, Submitted for Publication, 2016.

Jinoh Kim, Wucheol Yoo, Alex Sim, **Sang Suh**, Ikkyun Kim, “A Lightweight Network Anomaly Detection Technique,” Accepted for 2017 Workshop on Computing, Networking and Communications (CNC) held in conjunction with ICNC, Silicon Valley, CA, January, 2017

Humberto Aguilar, Ilhwan Moon, Jinoh Kim, **Sang C. Suh**, and Ganho Choi, “Enhancing Classification Accuracy using a Spatial Partitioning Technique,” in Proceedings of the 20th SDPS Conference (SDPS), Dallas, TX, November 2015

Tanik, Urcun J, **Suh, Sang**, Baugh, Veronica, Arkün-Kocadere, Selay, Gattaz, Cristiani, “Design and Process Science Lab: STEM Virtual Platform for Transdisciplinary Device Innovation Promoting Venture Development,” in Proceedings of the 20th SDPS Conference (SDPS), Dallas, TX, November 2015

Güldal, Serkan, Allehaibi, Saleh, Alshehri, Hussain, Alharthi, Abdulrahman, Baugh, Veronica, Shabnam, Shimin, Gattaz, Cristiane C., Tanik, U. John, **Suh, Sang**, “Transdisciplinary Convergence on the DPSL Platform: STEM Development with IOT Mobile Applications in Wolfram Framework,” in Proceedings of the 20th SDPS Conference (SDPS), Dallas, TX, November 2015

Anil Katta, Jinoh Kim, **Sang C. Suh**, Ganho Choi, “Incorporating Multiple Cluster Models for Network Traffic Classification,” in Proceedings of the 40th Annual IEEE Conference on Local Computer Networks (LCN), Clearwater Beach, FL, 2015

Jinoh Kim, Ilhwan Moon, Kyungil Lee, **Sang C. Suh**, Ikkyun Kim, “Scalable Security Event Aggregation for Situation Analysis,” in Proceedings of IEEE BigDataService 2015, San Francisco, March, 2015 (acceptance rate 25%)

Jinoh Kim, Ilhwan Moon, Kyungil Lee, **Sang C. Suh**, Ikkyun Kim, “Incremental Processing for Massive Security Event Aggregation,” Proceedings of 2015 Global Conference on Information Technology, Computing, and Applications, Las Vegas, January 2015

Baugh, Veronica L., Tanik, Murat M., Gattaz, Cristiane C., Tanik, U. John, **Suh, Sang**, “SDPS Mobile Application Module for DPSL Virtual Platform: Enabling Next Generation Collaboration and Convergence for SDPS Student Chapter Network,” in Proceedings of the 20th SDPS Conference (SDPS), Dallas, TX, November 2015

Veronica L. Baugh, Selay Arkün-Kocadere, Cristiane C. Gattaz, U. John Tanik, and **Sang Suh**, “DPSL Platform Advancing Rapid-Prototyping Capability in IOT Product Design: Value Driven Modeling and Simulation Approach with the P3Tech Advantage,” in Proceedings of the 20th SDPS Conference (SDPS), Dallas, TX, November 2015

Ilhwan Moon, Umar Albalawi, Jinoh Kim, **Sang C. Suh**, Wang-Hwan Lee, “A Hybrid Classifier with a Binning Method for Network Application Identification,” Journal of Integrated Design and Process Science, Vol. 18, No. 2, pp.3-22, 2014.

Justin Tharp, Jinoh Kim, **Sang C. Suh**, Hyeonkoo Cho, “*Maximizing True Positives for Signature-based Network Application Identification*,” International conference on Design and Process Sciences (SDPS), Kuching, Malaysia, June 2014.

Umar Albalawi, **Sang C. Suh**, Jinoh Kim, “*Incorporating Multiple Supervised Learning Algorithms for Effective Intrusion Detection*,” International Conference on Computer Networks and Security (ICCNS), Barcelona, Spain, February 2014.

Jinoh Kim, Ilhwan Moon, **Sang C. Suh**, Jaeho Cheong, Taehyun Hwang, “*Interactive Gene Variation Analysis on the Parallel Computing Platform*,” accepted for CSHL Meeting on Biological Data Science, Cold Spring Harbor, NY, November 2014 (Poster).

S. Kim, H. Kim, D. Lee and **Sang C. Suh**, “Agent-based Mobile Data Caching Strategies Using Data Significance”, *Transactions of the SDPS: Journal of Integrated Design and Process Science*, ISSN: 1092-0617, Volume 17, Number 1, IOS Press, Accepted for publication in March, 2013.

Justin Tharp, Jinoh Kim, **Sang C. Suh**, Hyeonkoo Cho, “Reconciling Multiple Matches for the Signature-Based Application Identification”, *Journal of Communications*, ISSN: 1796-2021, Volume 8, Number 12, pp. 883-892, Engineering and Technology Publishing, December, 2013.

J. Tharp, J. Kim, **Sang C. Suh**, H. Cho, “Reconciling Multiple Matches for the Signature-Based Application Identification”, *3rd International Conference on Communication and Network Security (ICCNS)*, London, UK, November 2013. Also published in *Journal of Communications*, December 2013.

I. Moon, U. Albalawi, J. Kim, **Sang C. Suh**, and W. Lee "Hybrid Classifier using Payload Encoding and Flow Statistics for Application Identification", *Proceedings of The 18th World*

Conference on Integrated Design and Process Technology (SDPS2013), the Society for Design and Process Science & Software Engineering Society, 7 pages, Sao Paulo, Brazil, Oct. 27-31, 2013.

Radmila Juric, Hamda Binghubash Almarri, Aurilla Arntzen, **Sang C. Suh**, and Alma Konjhodzic "TOWARDS DYNAMIC CREATION OF INTERDISCIPLINARY CURICULA", *Proceedings of The 18th World Conference on Integrated Design and Process Technology (SDPS2013)*, the Society for Design and Process Science & Software Engineering Society, 9 pages, Sao Paulo, Brazil, Oct. 27-31, 2013.

M.Todorov, N.M.Sirakov, **S.Suh**, 2013, Fast Splitting Scheme to Minimize New Energy Functional Containing Schroedinger Equation Solution, Application of Mathematics in Technical and Natural Sciences, *In M. Todorov Ed., American Institute of Physics*, Volume 1561, pp. 378-383 (2013), DOI: <http://dx.doi.org/10.1063/1.4827250>, Indexed by Thomson Reuters <http://scitation.aip.org/content/aip/proceeding/aipcp/1561;jsessionid=2hg7nkug8pr9j.x-aip-live-02>.

I. Moon, S. Kim and **Sang C. Suh**, "An Intelligent Decision Support System for Cropland Suitability Evaluation", *Transactions of the SDPS: Journal of Integrated Design and Process Science*, ISSN: 1092-0617, Volume 16, Number 3, IOS Press, September, 2012.

Pramukh R. Karla, **Sang C. Suh**, and Varadraj P. Gurupur, "Encrypting Ontological Meta-Model Using Elliptic Curve Cryptography with Identity Based Encryption", *Proceedings of The 8th International Conference on Computing Technology and Information Management (ICCM2012)*, IEEE pp. 146-150, ISBN-13: 978-89-88678-67-1, Seoul, Korea, April 24-26, 2012.

Sang C. Suh, Lavanya Gaddam, and Tarun Bheema, "Generating Ontology Relations through Clustering for Preventive Health Care", *Proceedings of The 5th International Multi-Conference on Engineering and Technological Innovation (IMETI2012)*, International Institute of Informatics and Systemics, Member of the International Federation for Systems Research (IFSR), pp. 75-80, ISBN-13: 978-1-936338-67-2, Orlando, Florida, July 17-20, 2012.

Varadraj P. Gurupur, **Sang C. Suh**, Richard R. Selvaggi, Pramukh R. Karla, "An Approach for Building a Personal Health Information System Using Conceptual Domain Knowledge", *Journal of Medical Systems*, Volume 36, No. 6, pp. 3685-93, DOI: 10.1007/s10916-012-9842-2, 2012.

Pramukh Karla, Shelly I. Saffer, Varadraj P. Gurupur, **Sang C. Suh**, " Identification of Class of Services in the Internet and a Proposed Approach to Traffic Prioritization at Layer 3," *Proceedings of the IEEE Southeast Conference*, Orlando, FL, March 15-18, 2012.

Pramukh Karla, Varadraj Gurupur, **Sang C. Suh**, "An approach to develop health information systems using concept maps", *Proceedings of The 17th World Conference on Integrated Design and Process Technology (SDPS2012)*, the Society for Design and Process Science & Software Engineering Society, 4 pages, Berlin, Germany, June 10-14, 2012.

Sang C. Suh, Varadraj P. Gurupur, Nigel Koay, Radmila Juric, Pramukh R. Karla, " Developing a preventive healthcare tool for Alzheimer's disease using semantic web technologies", *Proceedings of The 17th World Conference on Integrated Design and Process Technology (SDPS2012)*, the Society for Design and Process Science & Software Engineering Society, 6 pages, Berlin, Germany, June 10-14, 2012.

Nuthakki, M. K., Mete, M., Varol, C., **Suh, S. C.** (2011). UXSOM: UML generated XML to software metrics. *ACM SIGSOFT Software Engineering Notes, Volume 36*, No. 3, pp. 1-6, 2011 <http://dl.acm.org/citation.cfm?doid=1968587.1968609>.

Erdal Cosgun, Sam Saffer and **Sang C. Suh**, "Random Forest and Boosted Classification Tree Based Multifactor Dimensionality Reduction Analysis", *Proceedings of The 16th World Conference on Integrated Design and Process Technology (SDPS2011)*, the Society for Design and Process Science & Software Engineering Society, 15 pages, Jeju, Korea, June 12-16, 2011.

P. Krishna, K. Srinivasa, M. K. Nuthakki, M. Mete, C. Varol, and **S. C. Suh**, "Analysis of projects and volunteer participation in large scale free and open source software ecosystem," *ACM SIGSOFT Software Engineering Notes*, vol. 36, pp. 1-5, 2011.

N. M. Sirakov, **Sang C. Suh** and S. Attardo, "Automatic Object Identification Using Visual Low Level Feature Extraction and Ontological Knowledge", *Journal of Integrated Design and Process Science*, September, 2011.

Sang C. Suh and Gouthami Vudumula, "The Role of Conceptual Hierarchies in the Diagnosis and Prevention of Diabetes", *Proceedings of the 7th International Conference on Networked Computing and Advanced Information Management (NCM2011)*, ISBN: 978-89-88678-36-7, IEEE pp. 267-276, Gyeongju, Korea, June 21-23, 2011.

Sang C. Suh, and Kalyani Komatireddy, "Clustering of Ontology in Preventive Health Care Through Relational Ontology", *Proceedings of The 2011 International Conference on Data Mining (IKE'11): The 2011 World Congress in Computer Science, Computer Engineering, & Applied Computing (Worldcom'11) July 18-21*, Las Vegas, NV, Eds. Hamid Arabnia, ISBN: 1-XXXXX-XXX-4, CSREA Press, 7 pages, 2011.

Sang C. Suh, D. H. Lee, Radmila Juric, Jaya T. S., and Ajit Shilpa, "Preventive Healthcare System using Ontological Modeling and Semantic Reasoning By Converting Relational data", *Proceedings of The 16th World Conference on Integrated Design and Process Technology (SDPS2011)*, the Society for Design and Process Science & Software Engineering Society, 9 pages, Jeju, Korea, June 12-16, 2011.

Sang C. Suh, Radmila Juric, Jaya T. S., and Ajit Shilpa, "Smart Preventive Healthcare System using Ontological Reasoning", *Proceedings of The 16th World Conference on Integrated Design and Process Technology (SDPS2011)*, the Society for Design and Process Science & Software Engineering Society, 9 pages, Jeju, Korea, June 12-16, 2011.

Sang C. Suh and Lavanya Gaddam, “Role of Clustering of Ontology Relations for Preventive Health Care through Nutrition”, *Proceedings of the International Conference on Mobile IT Convergence (ICMIC2011)*, 7 pages, Gumi, Korea, September 26-28, 2011.

Sang C. Suh and K. Xiong, “Resource Provisioning in SLA-based Cluster Computing”, *Lecture notes in Computer Science - Job Scheduling Strategies for Parallel Processing*, Volume 6253/2010, ISBN: 3-642-16504-4 & 978-3-642-16504-7, DOI: 10.1007/978-3-642-16505-4_1, Springer Berlin/Heidelberg, pp. 1-15, November, 2010.

Sang C. Suh, Gayatri Appana, and S. Anaparth, “Design of Conceptual Search Engine Using Hierarchy of Attributes and Concepts”, *Proceedings of the 6th International Conference on Networked Computing and Advanced Information Management (Joint Conference with 6th IDC2010)*, ISBN: 978-89-88678-25-1, IEEE pp. 359-366, Seoul, Korea, August 16-18, 2010.

Sang C. Suh, Nikolay Sirakov, and Salvatore Attardo, “Automatic Object Identification Using Visual Low Level Feature Extraction and Ontological Knowledge”, *Proceedings of The 15th World Conference on Integrated Design and Process Technology (SDPS2010)*, the Society for Design and Process Science & Software Engineering Society, 9 pages, Dallas, TX, June 6-11, 2010, ISSN: 1090-9389.

Sang C. Suh, Kaiqi Xiong, and Ravikanth Pulipati, “Concept-based Classification of Data for Improving Search Accuracy and Relevancy”, *Intelligent Engineering Systems Through Artificial Neural Networks*, Vol. 20, pp. 41-48, ASME Press, New York, 2010, ISBN 978-0-7918-5959-9.

Sang C. Suh, Sam I. Saffer, and Jhansi Baireddy, “Visual Representation of Hierarchy of Attributes and Concepts as Ontology for Semantic Reasoning”, *Intelligent Engineering Systems Through Artificial Neural Networks*, Vol. 20, pp. 49-56, ASME Press, New York, 2010, ISBN 978-0-7918-5959-9.

Sang C. Suh and K. Xiong, “Resource Provisioning in SLA-based Cluster Computing”, *15th International Workshop on Job Scheduling Strategies for Parallel Processing (JSSPP10)*, 15 pages, Atlanta, GA, April 23, 2010.

Sang C. Suh, B. Wu, and Dan Li, “Knowledge Discovery on International Linkage of the Chinese Stock Market”, *Proceedings of The 2009 International Conference on Information and Knowledge Engineering (IKE’2009): The 2009 World Congress in Computer Science, Computer Engineering, & Applied Computing (Worldcom’09) July 13-16*, Las Vegas, NV, Eds. H. Arabnia, R. Hashemi, and F. Moxley, ISBN: 1-60132-114-7, CSREA Press, pp. 417-423, 2009.

Sang C. Suh S. Anaparthi, and N. Sirakov, “Basics of Concepts Representation for Document Summarization”, *Proceedings of the 5th International Conference on Networked Computing and Advanced Information Management (Joint Conference with 5th IDC2009)*, ISBN: 1-60132-114-7, August 25-29, pp. 1374-1380, Seoul, Korea, August 2009.

M. Yang, Jack Yang, **S. Suh**, H. Arabnia “Plenary Keynote Lecture Note: Next Generation Sequence Generation Sequencing Technologies Foster the New Initiatives of High-Performance Computing” In Proceedings of International Joint Conference on Bioinformatics, Systems Biology and Intelligent Computing”. Library of Congress Number 2009904091, ISBN 978-0-7695-3739-9, IEEE Computer Society Order Number P3739, BMS Part Number CFP0935H-PRT, IEEE Press 2009.

Sang C. Suh and Praveen Tunki, “A Novel Representation of Human Intention for Efficient Document Retrieval”, *Proceedings of The World Conference on Integrated Design and Process Technology*, the Society for Design and Process Science & Software Engineering Society, 8 pages, Montgomery, Alabama, November 1-5, 2009.

Published invited talk, “Foundations on Data and Visual Analytics (FoDAVA) – next generation search engine for better information and better answers”, 62 slides, The 10th International Conference on Computers, Communications and Systems (ICCCS2009), November 6th, Daegu University, Korea.

S. Suh, Jack Yang, M. Yang, H. Arabnia “Next Generation Sequence Analysis Using Genetic Algorithms on Multi-core Technology” In *Proceedings of ISIBM International Joint Conference on Bioinformatics, Systems Biology and Intelligent Computing*”, p.p. 190-194. Library of Congress Number 2009904091, ISBN 978-0-7695-3739-9, IEEE Computer Society Order Number P3739, BMS Part Number CFP0935H-PRT, IEEE Press 2009.

M. Yang, Jack Yang, **S. Suh**, and H. Arabnia “World Congress on Computer Science, Computer Engineering and Applied Computing Keynote Lecture: The impact of supercomputing in the next generation sequencing data mining” World Congress on Computer Science, Computer Engineering and Applied Computing. July 13-17, 2009 Las Vegas, Nevada, USA. In Proceedings of The 2009 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'09), CSREA Press, 2009.

Sang C. Suh and Nagendra Babu Pabbisetty, “A Conceptual Hierarchy-Based Approach For The Extraction of Medical Knowledge in Psychiatric Diseases”, *Intelligent Engineering Systems Through Artificial Neural Networks*, Vol. 18, pp. 237-244, ASME Press, New York, 2008, ISBN 978-0-7918-0282-3.

Sang C. Suh and Madhavi Valasingam, “The Role of Conceptual Hierarchies in the Diagnosis of Diabetes”, *Proceedings of The 2008 International Conference on Data Mining (DMIN'08): The 2008 World Congress in Computer Science, Computer Engineering, & Applied Computing (Worldcom'08) July 14-17*, Eds. R. Stahlbock, S. Crone, and S. Lessmann, ISBN: 1-60132-060-4, CSREA Press, pp. 719-724, 2008.

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