# Hung-Chi Su

Associate Chair, Department of Computer Science (870)680-8119 suh@astate.edu

### **Current Position**

Position Title: Associate Chair, Department of Computer Science Current Academic Rank: Associate Professor Rank Since: Fall 2008

#### Degrees

Ph.D.	Computer Science, Oklahoma State University, Stillwater, Oklahoma 2003
M.S.	Computer Science, Oklahoma State University, Stillwater, Oklahoma 1999
B.S.	Chemical Engineering, National Cheng-Kung University, Taiwan

#### **Scholarly Contributions and Creative Productions**

1986

#### Chapters

Hu, T., Gondra Luja, I., Su, H., & Chang, C. (2008). Advances in Computational Algorithms and Data Analysis. In S. Ao and B. Rieger and S. Chen (Ed.), (pp. 563-575). Springer.

#### Grants

Su, H. (2012). Dynamics of Relativistic Heavy Ion Collisions. National Energy Research Scientific Computing Center.

Su, H. (2012). Spirit Fitness Web Database System. Spirit Fitness - 12500.

Su, H. (2010). Clustering Algorithms for Large High-Dimensional Data Sets. Faculty research grant - 3800.

#### **Journal Publications**

Hammerand, E., & Su, H. (2011). Reduced Split/Merge Propagation in a Modified B-Link Tree Design. Journal of Computational Methods in Science and Engineering (JCMSE).

#### **Proceedings Publications**

Hammerand, E., & Su, H. (2010). Modified Concurrent Access to the B-Link Tree. CATA: 25th INTERNATIONAL CONFERENCE ON COMPUTERS AND THEIR APPLICATIONS, 49-54.

Hammerand, E. (2010). Modified Concurrent Access to the B-Link Tree. CATA: 25th INTERNATIONAL CONFERENCE ON COMPUTERS AND THEIR APPLICATIONS, 49-54. Hammerand, E., & Su, H. (2010). Top-Down Approach on Concurrent Access to the B-Link Tree. ISCA 19th INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING AND DATA ENGINEERING, 243-248.

Hammerand, E. (2010). Top-Down Approach on Concurrent Access to the B-Link Tree. ISCA 19th INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING AND DATA ENGINEERING, 243-248.

Chang, C., & Su, H. (2008). A Context-Aware English Learning System Based on Web Services. Proceedings of the 2008 International Conference on e-Learning, e-Business, Enterprise Information Systems, and e-Government, 8.

Li, R., Jiang, H., Zhang, B., & Jenness, J. (2008). Adaptive and Fault Tolerant Simulation of Relativistic Particle Transport with Data-level Checkpointing. Proceedings of 2008 IEEE 11th International Conference on Computational Science and Engineering,

Li, R., Jiang, H., Su, H., Zhang, B., & Jenness, J. (2008). Adaptive and Fault Tolerant Simulation of Relativistic Particle Transport with Data-level Checkpointing. Proceedings of 2008 IEEE 11th International Conference on Computational Science and Engineering,

Li, R., Jiang, H., Su, H., Zhang, B., & Jenness, J. (2008). Coordination Schemes in Distributed Simulation of Relativistic Particle Transport. Proceedings of the 23rd ACM Symposium on Applied Computing 2008, Special Track on Advances in Computer Simulation,

Li, R., Jiang, H., Zhang, B., & Jenness, J. (2008). Coordination Schemes in Distributed Simulation of Relativistic Particle Transport. Proceedings of the 23rd ACM Symposium on Applied Computing 2008, Special Track on Advances in Computer Simulation,

Dai, H., Whang, K., & Su, H. (2008). Locality of Corner Transformation for Multidimensional Spatial Access Methods. Proceedings of the First International Conference on Foundations of Informatics, Computing and Software,

Li, R., Jiang, H., Su, H., Zhang, B., & Jenness, J. (2008). On Load Balancing Distributed Simulation of Relativistic Particle Transport. Proceedings of PDPTA'08 - The 2008 International Conference on Parallel and Distributed Processing Techniques and Applications,

Li, R., Jiang, H., Zhang, B., & Jenness, J. (2008). On Load Balancing Distributed Simulation of Relativistic Particle Transport. Proceedings of PDPTA'08 - The 2008 International Conference on Parallel and Distributed Processing Techniques and Applications,

Li, R., Jiang, H., Su, H., Zhang, B., & Jenness, J. (2008). Parallel and Distributed Particle Collision Simulation with Decentralized Control. Proceedings of GPC 2008, the 3rd International Conference on Grid and Pervasive Computing (Lecture Notes in Computer Science), 5036/2008, 244-255. Li, R., Jiang, H., Zhang, B., & Jenness, J. (2008). Parallel and Distributed Particle Collision Simulation with Decentralized Control. Proceedings of GPC 2008, the 3rd International Conference on Grid and Pervasive Computing (Lecture Notes in Computer Science), 5036/2008, 244-255.

Su, H., Jiang, H., & Zhang, B. (2007). An Empirical Study on Many-Particle Collision Algorithms. Proceedings of the 22nd International Conference on Computers and Their Applications, 17-Dec.

Hu, T., Su, H., & Gondra Luja, I. (2007). Examining Nonlinear Interrelationships Among Foreign Exchange Markets in the Pacific Basin with Artificial Neural Network. Proceedings of PDPTA'07? The 2007 International Conference on Parallel and Distributed Processing Techniques and Applications, 829-835.

Su, H., Jiang, H., & Zhang, B. (2007). Flexible speculative parallelization of many-particle collision simulation. Proceedings of CAINE07, the 20th international conference on computer applications in industry and engineering,

Hu, T., Gondra Luja, I., & Su, H. (2007). Forecasting Daily Stock Returns of the East Asian Tiger Countries with Intermarket Influences: A Comparative Study on Artificial Neural Networks and Conventional Models. Proceedings of PDPTA'07? The 2007 International Conference on Parallel and Distributed Processing Techniques and Applications, 836-842.

Hu, T., Gondra Luja, I., Su, H., & Chang, C. (2007). Forecasting Inflation under Globalization with Artificial Neural Network-Based Thin and Thick Models. Proceedings of ICSCA'07, International Conference on Soft Computing and Applications, World congress on engineering & computer science 2007, 909-914.

Li, R., Jiang, H., Zhang, B., & Jenness, J. (2007). Speculative and distributed simulation of many-particle collisions systems. Proceedings of ICPADS 2007, the 13th international conference on parallel and distributed systems,

Li, R., Jiang, H., Su, H., Zhang, B., & Jenness, J. (2007). Speculative and distributed simulation of many-particle collisions systems. Proceedings of ICPADS 2007, the 13th international conference on parallel and distributed systems,

Li, R., Jiang, H., Jenness, J., & Zhang, B. (2007). Speculative Parallelization of Many-Particle Collision Simulations. Proceedings of PDPTA'07- The 2007 International Conference on Parallel and Distributed Processing Techniques and Applications,

Li, R., Jiang, H., Su, H., Jenness, J., & Zhang, B. (2007). Speculative Parallelization of Many-Particle Collision Simulations. Proceedings of PDPTA'07- The 2007 International Conference on Parallel and Distributed Processing Techniques and Applications,

Su, H., Jiang, H., & Zhang, B. (2007). Synchronization on speculative parallelization of many-particle collision. Proceedings of ICCSA'07, International conference on computer science and

applications, World congress on engineering & computer science 2007,

Jiang, H., Su, H., & Zhang, B. (2007). Toward Optimizing Particle-Simulation Systems. Proceedings of the International Conference on Computational Science 2007,

Dai, H., & Su, H. (2013). Clustering Performance of 3-Dimensional Hilbert Curves. The 24th International Symposium on Algorithms and Computation (ISAAC 2013),

Right here.http://www.cs.hku.hk/isaac2013/

#### **Other Institutional Service**

(Committee Member) Curriculum Committee (College of Sciences and Mathematics) Fall 2010 - Fall 2012

Chair of the Curriculum Committee (Computer Science) Fall 2010 - Summer 2012

Curriculum committee member (Computer Science) Fall 2010 - Summer 2012

(Committee Member) Graduate Assistant Committee (Computer Science) Spring 2010 - Summer 2012

(Faculty Advisor) IEEEXtreme (Computer Science) Fall 2009

(Faculty Mentor) ACM student chapter sponsor (University) Fall 2009 - Summer 2012

(Faculty Mentor) New Student Orientation (University) Summer 2009 - Summer 2013

(Committee Member) PRT (College of Sciences and Mathematics) Fall 2008 - Summer 2010

(Committee Member) PRT (Computer Science) Fall 2008 -Summer 2012

(University Senate Service) Faculty senate (University) Fall 2008 - Summer 2011

(Committee Chair) Library Book Allocation (University) Fall 2003 - Summer 2012

#### **Professional Service**

Reviewer, Journal articles, Journal of Parallel and Distributed Computing by Elsevier Fall 2012 - Spring 2013

Reviewer, Conference papers, The Third International Symposium on Multidisciplinary Emerging Networks and Systems (MENS2012) Spring 2012 - Summer 2012

Reviewer, Conference papers, The 2012 International Conference on Intelligent Computing (ICIC 2012) Zhengzhou, China Spring 2012 - Summer 2012

Reviewer, Journal article, IEEE Transactions on Parallel and Distributed Systems Fall 2011 - Spring 2012

Reviewer, Conference papers, The 6th IEEE Asia-Pacific Services Computing Conference (APSCC 2011) Summer 2011 - Fall 2011

Reviewer, Conference papers, The 2011 International Conference on Intelligent Computing (ICIC 2011) Spring 2011 - Summer 2011

Reviewer, Journal article, Journal of Signal Processing Applications in Human Computer Fall 2010

Program Committee Member, The 2nd International Conference on Emerging Intelligent Data and Web Technologies Fall 2010 - Summer 2011

Reviewer, Conference papers, The 5th IEEE Asia-Pacific Services Computing Conference (APSCC 2010) Summer 2010 - Fall 2010 Reviewer, Conference papers, The 4th IEEE Asia-Pacific Services Computing Conference (APSCC 2009) Summer 2009 - Fall 2009 Reviewer, Conference papers, The 3rd IEEE Asia-Pacific Services Computing Conference (APSCC 2008) Summer 2008 - Fall 2008 Reviewer, Conference papers, The International Conference on Computer Communications and Networks (ICCCN), 2008 Spring 2008

## Teaching

Fall 2006 Courses:

CS 2181 1 - STRUCTURED PROGRAMMING LAB CS 2183 1 - STRUCTURED PROGRAMMING CS 3453 1 - OPERATING SYSTEMS CS 4373 1 - DATABASE SYSTEMS **Spring 2007 Courses:** 

CS 5463 1 - COMPUTER NETWORKS CS 6853 1 - SPEC TOP ADV DATABASES Fall 2007 Courses:

CS 3453 1 - OPERATING SYSTEMS CS 4373 1 - DATABASE SYSTEMS Spring 2008 Courses:

CS 3543 1 - PROGRAMMING LANGUAGES CS 5463 1 - COMPUTER NETWORKS Fall 2008 Courses:

CS 3233 001 - Operating Systems CS 5543 1 - DATABASE SYSTEMS CS 6823 1 - SPECIAL TOPICS DATA MINING Spring 2009 Courses:

CS 4543 001 - DATABASE SYSTEMS

## Fall 2012 Courses:

CS 482V 001 - MOBILE DEVICE APPLICATIONS CS 482V 1 - SP PR APPLIED COMPUTING

#### Summer 2012 Courses:

CS 4313 001 - Computer Networks CS 5313 1 - COMPUTER NETWORKS CS 5313 2 - COMPUTER NETWORKS CS 6823 2 - SP TOP MACHINE LEARNING

# Spring 2012 Courses:

CS 5543 1 - DATABASE SYSTEMS CS 6823 1 - DATABASE SYSTEM IMPLEMENTATION

# CS 5313 1 - COMPUTER NETWORKS CS 5433 1 - ARTIFICIAL INTELLIGENCE Fall 2011 Courses:

CS 5543 1 - DATABASE SYSTEMS CS 6823 1 - SPECIAL TOPICS IN DATAMINING **Spring 2011 Courses:** 

# Fall 2010 Courses:

CS 3123 001 - Programming Languages CS 5313 1 - COMPUTER NETWORKS

# CS 5433 1 - ARTIFICIAL INTELLIGENCE CS 5543 1 - DATABASE SYSTEMS **Spring 2010 Courses:**

CS 3123 001 - Programming Languages CS 5313 1 - COMPUTER NETWORKS CS 6853 2 - SP TOP ADVANCED DATABASES Fall 2009 Courses:

- CS 5543 001 DATABASE SYSTEMS
- CS 5543 002 DATABASE SYSTEMS
- CS 583V 001 INTERNSHIP
- CS 6823 001 DATA MINING
- CS 688V 001 IND ST DAT ACC IN COLUMN STORE