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Thailand

Area of Interests

Parallel and distributed computing, Big data processing, Semantic Web, ontology and RDF, Deep learning application, Real-time embedded systems, High-level synthesis of VLSI systems, Low-power system design, Data mining and its application to architecture design, Fuzzy system.

Educations

UNIVERSITY OF NOTRE DAME Notre Dame, IN, USA
1994–1999

Ph.D Department of Computer Science and Engineering, GPA: 3.93

Thesis title: System Level Synthesis Considering Impreciseness based on Fuzzy Theory.

Research area: Architecture-level specification and synthesis algorithms, Fuzzy logic.

NORTHEASTERN UNIVERSITY Boston, MA, USA
1993–1994

M.S. College of Computer Science, June 1994, GPA: 3.75

Concentration: Artificial Intelligence

THAMMASAT UNIVERSITY Bangkok, Thailand
1988–1991

B.S. Department of Computer Science, April 1991, GPA: 3.4 Second Class Honor.

Experiences

KASETSART UNIVERSITY Bangkaen, Bangkok, Thailand
November 2017

Deep Learning Hackathon Organizer.

KASETSART UNIVERSITY Bangkaen, Bangkok, Thailand
December 2013 - Present

Associate Professor.

SILPAKORN UNIVERSITY Sanam Chandra Palace, Nakorn Pathom, Thailand
April, 2005 - December 2013

Associate Professor.

January 14, 2002 – April, 2005

Assistant Professor.

March 2005-March 2013

Head of Department of Computing.

Nov 2004-March 2005

Acting Head of Department of Computing.

May 2012–2013

Chairperson of Master Program in Computer and Information Science, Silpakorn University.

May 2000-March 2013

Chairperson of Master Program in Computer Science, Silpakorn University.

Chairperson of Master Program in Information Technology, Silpakorn University.

May 2000–March 2013

Adjunct Faculty at Department of Computer Engineering, Assumption University.

2000-2002

Adjunct Faculty at Department of Computer Science, Thammasat University.

2000-2013

Adjunct Faculty at Department of Information Technology, Sirindhorn International Institute of Technology, Thammasat University.

2004-2007

Adjunct Faculty at Shinawatra University.

May 2000–Oct 2004

Associated Chairman of Department of Mathematics.

Head Computer Science Division, Faculty of Science.

March 1, 2002 – May 31, 2002

Postdoctoral Research Assistant at University of Texas at Dallas, USA.

SHINAWATRA PAGING COMPANY

Bangkok, Thailand

June 1991–December 1992

Information system programmer. Develop and maintain computer programs in C and Foxbase for a variety of departments including accounting, billing, telemarketing, and engineering departments.

UNIVERSITY OF NOTRE DAME

Notre Dame, IN 46556, USA

September 1994–June 1999

Graduate Teaching Assistant, Graduate Research Assistant.

Course Taught

Graduate level	Undergraduate level
Deep learning and applications	
Computer Center Management	Programming Language Principles
Machine learning and deep learning	Real-Time System Engineering
Big data platform and processing (Hadoop Ecosystem)	Parallel and Distributed Computing
Research Methodology, Seminar	Computer System Laboratory
Computer Architecture	Computer Architecture
Advance Operating Systems	Technical Writing
Computational Theory	Operating Systems
Algorithm Analysis and Design	Algorithm Analysis and Design
	Digital Logic Design
	UNIX and C
	Java and C Programming
	Intro to Computer Programming
	Intro Computer Science
	Intro to Microprocessors
	System Analysis and Design
	Software Engineering

Language, Skills & Tools

- Deep learning tools: Tensorflow, pytorch, Keras, Caffe, CNTK
- Semantic web: Protegé', Ontology design, RDFlib, Redland, SPARQL, Rasqal, Rapper, Virtuoso, Ontotext, HDT
- Profiling: NSight, Pin (Instrumental Tools), Perf, Intel Vtune, Nsight, RAPL
- Big data: Hadoop, MapReduce, HBase, Hive, Pig, Mahout, Spark, Cloudera
- Parallel programming: CUDA/C/C++/pyCUDA, Thrust library, OpenMP, MPI, UPC, OpenACC, Horovod
- Languages: Python, C/C++, Java, Clojure, Perl/Shell programming, Matlab, UML
- Server: MongoDB, MySQL, Nodejs, Glassfish, Tomcat, MS Access, MS SQL
- Simulation, Modeling: ROS, OMNET++, UPPAAL, SPIN, USE, Weka, SystemC, GTKWave, EduMIPS, SPIM, OpenCV, LabView
- Visualization: Grafana, Kibana, Tableau, Rapid Miner, Google Studio
- Platform/Hardware: Azure, Google, Heroku, Line Service, Jetson, Arduino

Book Chapter

C. Chantrapornchai, P. Khuphira, Chatbot Application with Scene Graph in the Thai Language Computer Vision and Recognition Systems Research Innovations

and Trends, Edited by Chiranji Lal Chowdhary, G. Thippa Reddy, B. D. Parameshachari, Publisher: AAP, <https://www.appleacademicpress.com/computer-vision-and-recognition-systems-research-innovations-and-trends/9781774630150>

Kundjanasith Thonglek, Norawit Uraileertprasert, Patchara Pattiyathanee, and Chantana Chantrapornchai, Damaged Vehicle Parts Recognition Using Capsule Neural Network Computer Vision and Recognition Systems Research Innovations and Trends, Edited by Chiranji Lal Chowdhary, G. Thippa Reddy, B. D. Parameshachari, Publisher: AAP, <https://www.appleacademicpress.com/computer-vision-and-recognition-systems-research-innovations-and-trends/9781774630150>

Phattharaphon Romphet, Supasit Kajkamhaeng and Chantana Chantrapornchai, Handwriting recognition using CNN and its optimization approach, To appear in Computer Vision and Recognition Systems Using Machine and Deep Learning Approaches, Publisher: IET

C. Chantrapornchai, P. Khuphiran. Chatbot application with scene graph in Thai Language. Research Innovations and Trends on Computer Vision and Recognition Systems. Edited by, Chiranji Lal Chowdhary, G. Thippa Reddy, B. D. Parameshachari Publisher: CRC, <https://www.appleacademicpress.com/research-innovations-and-trends-on-computer-vision-and-recognition-systems-/960>

C. Chantrapornchai, S. Duangkaew, CNN Customizations With Transfer Learning for Face Recognition Task, Handbook of Research on Deep Learning Innovations and Trends (pp. 40-58). edited by Aboul Ella Hassanien, and Chiranji Lal Chowdhary, 2022, IGI Global. DOI: 10.4018/978-1-5225-7862-8.ch003

C. Chantrapornchai, Aree Kaegjing, Sathaporn Srakaew, Warot Piyanuntcharatsr, Songchok Krakhaeng, Utilizing Architecture Aspect for in Data Mining for Computer System Design. Intelligent Multidimensional Data Clustering and Analysis, (pp. 225-252). edited by Siddhartha Bhattacharyya, 2016, IGI Global.

C. Chantrapornchai, J. Preechasuk, (2017). Exploring Image and Video Steganography Based on DCT and Wavelet Transform. In N. Kumar, A. Sangaiah, M. Arun, and S. Anand (Eds.), Advanced Image Processing Techniques and Applications (pp. 61-89). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-2053-5.ch003

C. Chantrapornchai, V. Sirimun, Web Service Composition for Tourism Information, in Encyclopedia of Business Analytics and Optimization (5 Vol.), (pp. 2696-2705) John Wang (ed.), 2014. IGI Global.

C. Chantrapornchai, W. Chedsiri, Stock Counting System Using PDA: Case Study in Encyclopedia of Business Analytics and Optimization (5 Volumes), (pp. 2311-2322) John Wang (ed.), 2014. IGI Global.

Journal Publications

Kundjanasith Thonglek, Norawit Uraileertprasert, Patchara Pattiyathanee, Chantana Chantrapornchai, Vehicle Part Damage Analysis Platform for Autoinsurance

Application. ECTI Transactions on Computer and Information Technology (ECTI-CIT), 2021, Vol. 15 No. 3, pp 313-323.

Lattawit Kulanuwat and Chantana Chantrapornchai and Montri Maleewong and Papis Wongchaisuwat and Supaluk Wimala and Kanoksri Sarinnapakorn and Surajate Boonya-aroonnet, Anomaly Detection Using a Sliding Window Technique and Data Imputation with Machine Learning for Hydrological Time Series, Water 2021, 13(13), 1862.

Supasit Kajkamhaeng, Chantana Chantrapornchai: SE-SqueezeNet: SqueezeNet extension with squeeze-and-excitation block. Int. J. Comput. Sci. Eng. 24(2): 185-199 (2021)

C. Chantrapornchai, A. Tunsakul. Information Extraction Tasks based on BERT and SpaCy on Tourism Domain. ECTI Transactions on Computer and Information Technology (ECTI-CIT), 2019, Vol. 15 No. 1, pp 108-122.

C. Chantrapornchai, C. Choksuchat. Combined bit map representation and its applications to query processing of resource description framework on GPU. Int. J. High Performance Computing and Networking, 15(1/2), pp. 45-57.

C. Chantrapornchai, C. Choksuchat, TripleID-Q: RDF Query Processing Framework using GPU. IEEE Transactions on Parallel and Distributed System, Online 12 March 2018, 29(9), Sept 2018, 2121 - 2135, doi. 10.1109/TPDS.2018.2814567

C. Choksuchat, C. Chantrapornchai. Various RDF-Strings Search Approaches on Different GPU Memory Models. International Journal in Computation Science and Engineering, Inderscience. Vol. 17, No. 4, 2018, pp. 398-410.

C. Chantrapornchai, C. Choksuchat. Ontology Construction through the Application: Case Study of Health Tourism in Thailand. SpringerPlus, 5(1), 1-31 Online 20 December 2016, DOI: 10.1186/s40064-016-3747-3.

C. Choksuchat, C. Chantrapornchai. Practical Parallel String Matching Framework for RDF Entailments with GPUs, Information System Frontier, August 2018, 20(4), pp. 863-882, <http://link.springer.com/article/10.1007/s10796-016-9692-4>.

C. Chantrapornchai, N. Bullaw, C. Choksuchat. Semantic Image Search for Western Region Tourism in Thailand, Journal of Information Processing Systems (KIPs), Vol. 14, No.5, 2018., pp. 1195-1214, 10.3745/JIPS.04.0088.

Chantana chantrapornchai, Paingruthai Nusawat. Two Machine Learning Models for Mobile Phone Battery Discharge Rate Prediction based on Usage Patterns. Journal of Information Processing Systems (KIPs), Vol. 12, No.3, 2016, pp. 436-454.

C. Choksuchat, C. Chantrapornchai. On the Development of Health Tourism Semantic Web with its Parallel Engine. International Journal on Metadata, Semantic web and Ontologies, Vol. 11 No. 1, 2016

Kanok Hournkumnuard, Witchaya Pornjarungsak, Chantana Chantrapornchai.

On the Parallel Simulation of Microparticle Capture in Axial Magnetic Filter. *Kasetsart J. (Nat. Sci.)*, 49 , 2015, 1012 - 1021.

Noppadol Chumchob, Sopida Jewprasert, Chantana Chantrapornchai. Multigrid solution of the nonlinear PDEs arising in elastic image registration with application to a group of monomodal images'. *ScienceAsia*, 42 (2016): 415–422

Sopida Jewprasert, Noppadol Chumchob, Chantana Chantrapornchai. Fourth-Order Compact Finite Difference Scheme for Higher-Order PDE-Based Image Registration. *East Asian Journal on Applied Mathematics*, Vol. 5, No. 4, November 2015, pp. 361-386.

S. Navapanitch, C. Choksuchat , C. Chantrapornchai. Parallel Patient Karyotype Information System using Multi-threads. *Applied Medical Informatics*, Vol. 37, No. 3, 2015, 39-48.

W. Piyananjaratsri, S. Srakaew, Chantana Chantrapornchai. On the comparison of malware detection methods using data mining with two feature sets. *International Journal of Security and Its Applications*, Vol. 9, No. 3 (2015), pp. 293-318.

Chantana Chantrapornchai, Kornkanok Churin Jitdamrong Preechasuk Suchitra Adulkasem. Video Steganography for Hiding Image with Wavelet Coefficients. *International Journal of Multimedia and Ubiquitous Engineering*, June, 2014, Vol.9, No.6 (2014), pp.385-396.

Chantana Chantrapornchai, Kanitsara Kinputtan, Apaporn Santibowanwing. Test Case Reduction Case Study for White Box Testing and Black Box Testing using Data Mining. *International Journal of Software Engineering and Its Applications*, June, 2014, Vol.8, No.6 (2014), pp.319-338.

Kanok Huankumnerd, Banpot Dolwithayakul, Chantana Chantrapornchai. Parallel Simulation of HGMS of Weakly Magnetic Nanoparticles in Irrotational Flow of Inviscid Fluid. *Scientific World Journal*, Volume 2014 (2014), Article ID 519654, 12 pages.

Banpot Dolwithayakul, Chantana Chantrapornchai, Noppadol Chumchob. Utilizing the Pipeline Framework and State-Based Nonlinear Gauss-Seidel for Large Satellite Image Denoising based on CPU-GPU Cores. *Int. J. Computer Applications in Technology, Inderscience*, Vol. 52 No.2, 2015, pp 262–276.

Chantana Chantrapornchai, Sangchan, Atitaya Kantankul, Chidchanok Choksuchat Suchitra Adulkasem. Ontology-based question answering system development for case study of Thai cats. *International Journal of Multimedia and Ubiquitous Engineering*, Vol. 9 No. 3, 2014, pp. 187-202.

Banpot Dolwithayakul, Chantana Chantrapornchai, Noppadol Chumchob. State-Based Gauss-Seidel Framework for Real-time 2D Ultrasound Image Sequence Denoising on GPUs. *International Journal of Multimedia and Ubiquitous Engineering*, Vol 9. No. 1, Jan, 2014, pp. 29-48 <http://dx.doi.org/10.14257/ijmue.2014.9.1.04>.

Banpot Dolwithayakul, Atchara Chatkaew, Chantana Chantrapornchai, and Noppadol Chumchob. An Adaptive Parallel Method for Denoising Microorganism Im-

age from Scanning Electron Microscope. Journal of Advanced Microscopy Research Vol. 8, 2013, pp. 1-8.

C. Chantrapornchai, P. Ratchpradit. Expert system for rice disease diagnosis. E-veridian Journal, Vol.1, Jan-Apr, 2013.

C. Chantrapornchai, P. Meemasuk. Food Advice System for Patient with Kidney Disease. E-veridian Journal, Vol.1, Jan-Apr, 2013.

C. Chantrapornchai, P. Meemasuk. On the Development of Nutrition Information Systems for Kidney Disease Patients. International Journal of Database and Applications, 6(3), 2013, pp. 33-38.

C. Chantrapornchai, D. Sawangkokrouk, T. Leadprathom. Project Management Software: Allocation and Scheduling Aspects. International Journal of u-and e-service, Science and Technology, 6(3), June, 2013, pp.35-42.

B. Dolwithayakul, C. Chantrapornchai, N. Chumchob. Additive and Multiplicative Noise Removal Framework for Large Scale Color Satellite Images on OpenMP and GPUs. Studies in Surveying and Mapping Science (SSMS), Vol.1 No.1,2013,pp.10-16, Available online at <http://www.as-se.org/ssms/paperInfo.aspx?ID=2880>.

J. Juljaroenkul, C. Chantrapornchai. Wireless System Design Experience: Case Study of A Manufacturing Factory. Journal of Multimedia and Ubiquitous Engineering,8(2), April, 2013, 35-44.

R. Panna R. Thesrumluk C. Chantrapornchai. Development of Energy Saving Smart Home Prototype. Journal of Smart Home, January 2013, 7(1), pp. 47-65, Available online at http://www.sersc.org/journals/IJSH/vol7_no1_2013/6.pdf.

K. Noipithuk, C. Kitkobchai, C. Chantrapornchai. Location-Based Application Based on Prefetching on Mobile Applications : Case Study of Finding Interesting Restaurants. International Journal of Computer Applications (IJCA), 58(13), pp. 22-26, November 2012, DOI: 10.5120/9342-3659.

M. Soiraya, S. Thanalerdmongkol, C. Chantrapornchai. Using A Data Mining Approach: Spam Detection on Facebook. International Journal of Computer Applications (IJCA), November 2012, 58(13), pp. 27-32, DOI:10.5120/9343-3660.

S. Dianprapai, C. Chantrapornchai, O. Wongtaweasap, On the Computer Simulation of Microparticles Capture in Magnetic Filters using OpenMP. International Journal of Computer Applications (IJCA), Vol. 51, No. 14, August, 2012, DOI:10.5120/8110-1723.

Banpot Dolwithayakul, Chantana Chantrapornchai, Suabsakul Yooyeunyong. Electromagnetic Sounding Equations Solver on Heterogeneous Medium for Multilayered Earth using Message Passing Interface and Open Specification for Multi-Processing (OpenMP). Journal of KMUTNB, Vol. 22, No. 3, September - December, 2012, pp. 651-660.

S. Kabinsingha, S. Chindasorn, C. Chantrapornchai, A Movie Rating Approach

and Application Based on Data Mining. *International Journal of Engineering and Innovation Technology*. July 2012, pp. 77-83.

B. Dolwithayakul, N. Chunchob and C. Chantrapornchai, Two Parallel Strategies for Real-time Spatial Video Denoising for Multi-core Processors. *International Journal of Computer Applications (IJCA)*, Vol. 48, No. 16, DOI:10.5120/7433-0397.

C. Chantrapornchai and T. Sathapanawat. Corrugation Software Development and Deployment: A Case Study. *International Journal of u- and e- Service, Science and Technology* , Vol. 5, No. 1, March, 2012, pp. 1-24.

Chidchanok Choksuchat and Chantana Chantrapornchai. On The Improvement of Search Engine Using Semantic Web:Case Study of Hua Hin Tourism Information System. *ECTI Transaction on CIT*, Vol.6, No.2, 2012, pp. 186-204.

C. Chantrapornchai and W. Jongjam. Design and Implementation of an MIS for Specification Comparison : A Case Study of 3 Scoring Approaches. *International Journal of Information Technology Project Management*, Vol. 5, No.2, 2014, pages 78-103, April-June 2014.

C. Chantrapornchai, K. Sripanomwan, O. Chaowalit. E-Wizard Toolkit: A Prototype Tool for Concurrent and Embedded System Design. *International Journal of Control and Automation*, Vol. 4 No. 2, June 2011, pages 125–140.

S. Choimeun, N. Phumejaya, S. Pomnakchim, C. Chantrapornchai. Using GIS Tool for Presenting Spatial Data: Case Study Nakorn Pathom Province. *International Journal of u- and e- Service, Science and Technology*, Vol. 4, No. 2, June 2011, pages 53–68.

C. Chantrapornchai. Development of a Faculty Work Load System: A Case Study in a Public University. *International Journal of Information Systems in the Service Sector*, IGI Press, Vol. 4(3), July-September 2012, pp 71-86.

Kanok Hournkumnuard, Chantana Chantrapornchai. Parallel simulation of concentration dynamics of nano-particles in High Gradient Magnetic Separation. *Simulation Modeling Practice and Theory*, Vol. 19 (2011), pages 847-871, DOI information: 10.1016/j.simpat.2010.11.003.

K. Hournkumnuard, C. Chantrapornchai (Phongpensri) Sergei Gorlatch, and Torsten Hoefler. Two Parallel Algorithms for a Mass Transfer Simulation of Magnetic Nanoparticles. *Electrical Eng., Electronics, and Communications (ECTI-EEC)*, Vol. 2, 2011, pp. 236 – 245.

K. Hournkumnuard, Chantana Phongpensri (Chantrapornchai), Saran Kienphapai, Opas Wongtaveesap, Sergei Gorlatch. Parallel Algorithm and Visualization of High Gradient Magnetic Separation of Nanoparticles. *International Journal on Computer and Applications*, ACTA Press, Vol. 33, No. 1, 2011, pages 70-82.

C. Chantrapornchai (Phonpensri) , Banpot Dolwithayakul Kanok Huankumnerd and Sergei Gorlatch. Parallel Mass Transfer Simulation of Nanoparticles using

Nonblocking Communication. *International Journal of Multimedia and Ubiquitous Engineering*, Vol. 5, No. 1, January, 2010, pages 41-52.

C. Chantrapornchai, W. Surakumpolthorn, E. H-M. Sha. Design Exploration with Imprecise Latency and Register Constraints. *IEEE Transactions on Computer-Aided Design of Integrated Circuits*, December 2006, pages 2650-2662, impact factor 1.0.

C. Chantrapornchai and S. Suriyawong. The Study of Results on Search Engine Algorithm : Case Study on www.cs.su.ac.th. *Proceedings of ICAS 2006*, also accepted in *Laos Journal of Applied Science*, special issue, 2006, pages 624-633.

J. Chantasitiporn, and C. Chantrapornchai. Medicine Tablet Identificiaton Using Feature Extraction based on Neural Network *Proceedings of KSAS 2006*, also accepted in *KMITL Journal of Science*, special issue, May-December 2006.

Q. Zhuge, E. Sha, C. Chantrapornchai. Efficient Variable Partitioning and Scheduling for DSP Processors with Multiple Memory Modules. *IEEE Transactions on Signal Processing*, Vol. 52, No. 4, April 2004, pages 1090-1099.

C. Chantrapornchai, S. Tongsima. Resource Estimation Algorithm under Impreciseness Using Inclusion Scheduling. *International Journal on Foundations of Computer Science*, Special Issue in Scheduling, Vol. 12, No. 5, 2001, pages 581-598.

S. Tongsima, C. Chantrapornchai, T. O'Neil and E. Sha. Properties and Algorithms for Unfolding of Probabilistic Data-flow Graphs. *Journal of VLSI Processing*, Vol. 25, No. 3, July 2000, pp. 215–233.

C. Chantrapornchai, E. H-M Sha and X. S. Hu. Efficient Module Selections for Finding Highly Acceptable Designs based on Inclusion Scheduling. *Journal of System Architecture*, Vol 11, No. 4, 2000, pp. 1047–1071.

C. Chantrapornchai, E. H-M Sha and X. S. Hu. Efficient Acceptable Design Exploration Based on Module Utility Selection. *IEEE Transactions on Computer Aided Design of Integrated Circuits and Systems*, Vol 19, No. 1, Jan. 2000, pages. 19-29.

S. Tongsima, C. Chantrapornchai, N. Passos, D. Surma and E. Sha Probabilistic Loop Scheduling for Applications with Uncertain Time. *IEEE Transactions on Computers*, Vol. 49, No. 1, Jan. 2000, pages. 65-80.

S. Tongsima, C. Chantrapornchai, N. Passos, D. Surma and E. Sha. Reducing data hazards on multi-pipelined DSP architecture with loop scheduling. *Journal of VLSI signal processing*. Also reprinted in *NECTEC Journal*, Vol 1 No 5, 1999, pages 171–183.

Yi Tian, Edwin H-M Sha, C. Chantrapornchai. Optimizing Page Replacement for Multiple-Level Memory Hierarchy. *International Journal of Computer and Their Applications*, Vol. 6. No. 4, Dec 1999, pages 212-222.

S. Tongsima, C. Chantrapornchai, E. H-M Sha, and N. L. Passos. Efficient Loop Scheduling and Pipelining for Applications with Non-uniform Loops. *IASTED*

International Journal of Parallel and Distributed Systems and Networks, Volume 1, Number 4, 1998, Washington DC, pages 204–211.

Conference Publications

Intouch Prakaisak, Ekachai Phaisangittisagul, Montri Maleewong, Kanoksri Sarinapakorn and Chantana Chantrapornchai, Detecting Anomaly and Replacement Prediction for Rainfall Open Data in Thailand, Proceedings of JCSSE, Bangkok, Thailand, July, 2021, pp. 1–6. DOI: 10.1109/JCSSE53117.2021.9493814.

P. Romphet , C. Chantrapornchai, Hand Writing Recognition Model Enhancement Exploration Based on Skipped Connections, Proceedings of JCSSE, Bangkok, Thailand, November, 2020, pp 122-127

P. Khuriphiran, C. Chantrapornchai. Thai Scene Graph Generation from Images and Applications. Proceedings of ICSEC, Bangkok, Thailand, 30 Oct.-1 Nov. 2019.

Chayanin Tongphasook , Chantana Chantrapornchai, Two Recognition Models for Thai Dancing Data Set, InCIT, October24-25, 2019.

Kundjanasith Thonglek, Norawit Urailetrprasert, Patchara Pattiyathanee , Chantana Chantrapornchai, IVAA: Intelligent Vehicle Accident Analysis System, Proceedings of JCSSE, Bangsaen, Chonburi, Thailand, July 10-12, 2019.

C. Chantrapornchai, A. Tunsakul, Information Extraction based on Named Entity for Tourism Corpus, Proceedings of JCSSE, Bangsaen, Chonburi, Thailand, July 10-12, 2019, pp 187-192

Krittin Meenrattanakorn, and Chantana Chantrapornchai, Expanding Video Memory through Texture Migration for Out-of-core Shading, IEEE Proceedings of ICSEC, Chiang Mai, Thailand, November 2018.

Chidchanok Choksuchat, Sergei Gorlatch, Chantana Chantrapornchai, CBM: A Compact Representation and its Parallel Search for Query Processing on GPU, The 33rd ACM Symposium On Applied Computing, Pau, France, April 9 - 13, 2018, pp. 1065-1067, doi: 10.1145/3167132.3167413

Chantana Chantrapornchai, Samrid Duangkaew, On the Performance Issues of Various Convolutional Neural Networks (CNN) for Face Recognition Tasks, Management and Innovation Technology International Conference, Dec. 4-6, 2017.

Chantana Chantrapornchai, Pisit Makpaisit, TripleID-C:Low Cost Compressed Representation for RDF Query Processing in GPUs , ACM Proceedings of HP-CAsia, January 28-31, 2018, pp. 261-270.

Chantana Chantrapornchai, On the Fine Tuning Pretrained CNN models, Proceedings of ANSCSE, August 4-5, 2017.

Chantana Chantrapornchai, Chidchanok Choksuchat, Improving Cytogenetic Search with GPUs Using Different String Matching Schemes, Advanced Data Mining and Applications, Dec 12-15, 2016, Gold Coast, Australia, Lecture Notes in Computer Science, Vol. 10086, pp. 188-202.

Chantana Chantrapornchai, Chidchanok Choksuchat, Michael Haidl, Sergei Gorchatch, Entailment Processing for Large RDF Data Sets using GPU, SoMeT2016, IOSPress. 333-345, 2016.

Chantana Chantrapornchai, Chidchanok Choksuchat, Processing Deep Learning on GPUs: Case Study Health Tourism Semantic Data, invited, Proceedings of ANSCSE, 27-29 July, 2016.

Panu Viriyakamonphan, Chantana Chantrapornchai, Query Processing Framework for HDT Using GPUs, International Joint Conference on Computer Science and Software Engineering (JCSSE) 2016, Khon Kaen, Thailand, 13-15 July 2016.

Chantana Chantrapornchai, Putchong Uthayopas, A Road to Student Cluster Competition for Thailand, International Joint Conference on Computer Science and Software Engineering (JCSSE) 2016, Khon Kaen, Thailand, 13-15 July 2016.

Chantana Chantrapornchai, Chidchanok Choksuchat, Michael Haidl, and Sergei Gorchatch, TripleID: A Low-Overhead Simplified Representation and Query with GPU for Large RDFs, Beyond Databases, Architectures and Structures. Advanced Technologies for Data Mining and Knowledge Discovery Vol. 613, CCIS, pp 400-415.

Songchok Khakhaeng, and Chantana Chantrapornchai, On the Finding Proper Cache Prediction Model Using Neural Network, The 8th International Conference on Knowledge and Smart Technologies, 3-5 February 2016, pp 146-151

C. Choksuchat, C. Chantrapornchai, M. Haidl, and S. Gorchatch, Accelerating Keyword Search for Big RDF Web Data on Many-Core Systems, 4th International Conference, SoMet , Naples, Italy, September 15-17, 2015, CCIS 532, pp. 190-202,2015.

C. Choksuchat, and C. Chantrapornchai, Optimization Parallel Search for Resource Description Framework Tasks, GPU Technology Conference, Asia South 2015, NVIDIA GTC 2015 Poster Contest, Singapore, August 25, 2015, MERIT AWARD.

Panita Pongpanitanont, and Chantana Chantrapornchai On the Improvement of Sliding Windows for Image Denoising on GPUs Using CUDA Architecture, ANSCSE 19, 17-19 June, 2015.

Sataphat Navaphanich, Putchong Uthayopas, and Chantana Chantrapornchai Parallel Search for Cytogenetic Database based on Nodejs, ANSCSE 19, 17-19 June, 2015.

Kanok Hournkumnuard, Chantana Chantrapornchai, On the Parallel Simulation of Microparticle Capture in Axial Magnetic Filter, ASIMMOD 2015, 22-23 January 2015.

Prach Chaisiri, Kanok Hournkumnuard, Chantana Chantrapornchai, Parallel Simulation of Concentrating of Weakly Magnetic Nanoparticles by High Gradient Magnetic Field using GPUs, in ICSEC 2014, July 31-Aug 1, 2014, Korn Kaen, Thailand, pp. 67 - 72, doi:10.1109/ICSEC.2014.6978131.

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Honors

NVIDIA DLI CERTIFICATES 2021 - Present

FUNDAMENTALS OF DEEP LEARNING FOR MULTI-GPUs

APPLICATIONS OF AI FOR ANOMALY DETECTION

NVIDIA DLI AMBASSADOR 2019 - Present

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FUNDAMENTALS OF ACCELERATED COMPUTING WITH CUDA C/C++

FUNDAMENTALS OF ACCELERATED COMPUTING WITH CUDA PYTHON

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Prize of Excellent Team, Student Adviser

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ASIAN SUPERCOMPUTER COMPETITION
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WINDOWS NT KERNEL WORKSHOP TRAINING 10-14 March, 2009 Travel Grant from Microsoft	Beijing, China
INTEL MULTICORE TRAINING 2008	SIPA, Thailand
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Technical Program Committee for 2003-2005 EECON-ECTI, Thailand.
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Technical Program Committee of NCSEC 2001-2012. Program committee for 15th ISCA International Conference on Parallel and Distributed Computing Systems (PDCS), Louisville, Kentucky, September 2002.
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Program committee for socpros '2011.

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Committee for National Software Contest (NSC) 2004-2013.

Program committee for KST 2011-2020.

Editorial Board of International Journal of Data Science (Inderscience).

- Reviewer and/or TPC for many conferences and journals including MULGRAB (2009-2012), UNNEST (2009-2012), Em-Com (2009), ISA (2011), IEEE Communications, the 7th IEEE International Symposium on the Frontiers of Massively Parallel Computation, IEEE/ACM International Symposium on System Level Synthesis (1996-1997,2002), IEEE Great Lake Symposium on VLSI (1995-1997), IEEE transactions on Computers, IEEE Transactions on Fuzzy Systems, IEEE transactions on Computer-Aided Design of Integrated Circuits, IEEE transactions on Signal Processing, IEEE transactions on VLSI Systems, IEEE transactions on Parallel and Distributed Systems, ACM Transactions on Embedded Computing Systems, Journal of Intelligent Manufacturing, IJMUE, IJUNESST, Journal of System Architecture, Journal of Supercomputing, The Scientific World Journal, Jordanian Journal of Computers and Information Technology, TODAES , JCSSE(2006-2016), NCSEC(2001-2010), ICSEC (2011-2013) ICEP(2003), ISCA (PDCS), ACM LCTES (2003), IEEE TENCON(2004-2005), ISCAS(2004-2006), ICCS (2008), NECTEC Journal (2008), IADIS (2008-2012), EUC(2005), ESO(2008), MUE (2008-2011), TISD(2008-2009),socpros(2011),CICON(2011), ICCCT (2012), TMPC(2012-2013), KISE (2013), ISCP (2012-2013), AUCC (2012-2013), AIM-13, SMPE-14, FCC-14, ICIIST -2014 , WSecurity 2013, KiSE'14 , JCSSE 2014, ICSEC 2014, ISIP 2013, KST 2016, etc.
- RCM for ISCAS(2005-2013), RCM for ECTI-CARD(2012).
- Steering committee for KST (2010-2013), JCSSE (2011-2014), ICSEC (2011-2013), IADIS (2012).
- Reviewer for many National Science Journals including Thammasat University, SIIT, Chulalongkorn University, KMUTT, KMITL, KMITNB, KKU etc.
- Reviewer for Computer Science Academic Program for many universities and secondary schools, JSTP program etc.
- Member of Editorial Board: IJDS, IJMUE, IJUNESST etc.
- Invited speaker to SST (Thailand) on System Analysis and Design (2001-2002).
Invited speaker to Thomas Idea (Thailand) on Object-oriented Programming (2003).
Invited Instructor for Thailand Computer Olympic Candidates 2000-2003.
Invited Instructor for Secondary-School Level Computer Science Teaching Workshop for Thai Public Schools (2001-2011).

Scholarships and Grants

Visual Application Generator for Small Real-Time Embedded Systems (April 2000 - July 2004), NECTEC, Thailand. (Principle Investigator)

Research and Development for 3rd Generations Mobile Communication-Phase 2 (November 2002 - February 2006), NECTEC, Thailand.

Efficient algorithms on architectural level synthesis for real-time VLSI systems (July 2003-June 2005), The Thailand Research Fund, Thailand. (Principle Investigator)

Techniques for visual programming for automatic code generation in C Using MPI (April 2003 - Dec. 2004), Faculty of Science 's Research Fund, Silpakorn University, Thailand. (Principle Investigator)

Techniques for visual programming for automatic code generation in C++ Using OOMPI (January 2007 - March 2008), Faculty of Science 's Research Fund, Silpakorn University, Thailand. (Principle Investigator)

Parallel Algorithm for Ultra-Fine Particle Simulations (October 2007- 2011), Silpakorn Research Institute, Thailand. (Principle Investigator)

Development of Fuzzy System Toolkit for Rapid Prototype (January 2008- May 2010) , NECTEC, Thailand. (Principle Investigator)

Development of parallel fuzzy library for embedded systems (July 2008 - July 2010), Faculty of Science 's Research Fund, Silpakorn University, Thailand. (Principle Investigator)

Software for Corrugating Process (October 2009-January 2012), National Research Council of Thailand. (Principle Investigator)

Development of Parallel Algorithms for Magnetic Sounding Equations (July 2010 - March 2012), Faculty of Science 's Research Fund, Silpakorn University, Thailand. (Principle Investigator)

Parallel Search Engine: Case study of Hua-hin Tourism, (February 2012 - November 2013), Faculty of Science 's Research Fund, Silpakorn University, Thailand. (Principle Investigator)

A System of parallel simulation and visualization of transport of nano-magnetic drug carriers in blood vessels and surrounding, (October 2013 -Aug 2015), Silpakorn Research Institute, Thailand.

Application of Parallel Computation and Simulation Model for the Capture of Ultra-Fine Weakly Magnetic Particles in Fluid (October 2010- Aug 2015), Silpakorn Research Institute, Thailand.

Simulation of Magnetic Delivery of Nano-Drug Carriers (October 2011- Present), Silpakorn Research Institute, Thailand.

Health Tourism Management: Case study of Hua-Hin Ontology, parallel and cloud computing, (August 2013 -2015), Thailand Research Fund (TRF-THM). (Principle Investigator)

Health tourism Information Service for Public Relation via Web Service and Augmented Reality, (April 2015-2017), Thailand Research Fund (TRF-THM). (Principle Investigator)

Applications of Concurrent Search for Aberration Patterns in Human Genetic Information System, KURDI, (January 2016 -2018). (Principle Investigator)

Accelerating information extraction in health tourism domain using GPUs, KURDI, (2017 - 2020). (Principle Investigator)

Face recognition of suspect using deep learning, CHE-RTA, (2017 - 2019). (Principle Investigator)

Microarchitecture optimization and exploration for efficient deep learning model construction based on Graphics Processing Units, NCRT, Thailand, 2020- Present.

Agriculture Mobile Robot and Big data analytic platform, DE Ministry, 2020 - Present.

Real-time Automatic Asset Tracking for Warehouse using UWB : Case study Be-tagro Ltd, NCRT, 2020 - Present.

Micro-architecture Improvement for Face Recognition tasks, PMU-B, NXPO, 2020- Present.

Finding inefficiency of Power Usage Case study Kasetsart University Data Center, EPPO, 2018- Present.

References Upon request.