

List of Publication

- Lavangnananda, K. and HemmatQachmas, M.A., 2020, *Finding Overlapping Clusters in a Highly Connected Graph from a Given Difference Density*, **Proc. of the 2020 IEEE International Conference on Big Data, (IEEE BigData 2020)**, 10th – 13th December, On-line, USA.
- Nasrat, N., Khamosh, A. and Lavangnananda, K., 2020, *Challenges and Hurdles to E-learning Implementation During COVID-19 Outbreak: A Case of Shaikh Zayed University*, **Proc. of the 2nd International Conference on Informatics, Multimedia, Cyber, and Information System (ICIMCIS 2020)**, 19th – 20th November, On-line, Indonesia.
- Thanapol, P., Lavangnananda, K., Bouvry, P., Pinel, F. and Leprévost, F., 2020, *Reducing Overfitting and Improving Generalization in Training Convolutional Neural Network (CNN) under Limited Sample Sizes in Image Recognition*, **Proc. of the 5th International Conference on Information Technology (InCIT2020)**, 21st - 22nd October, Bangsaen, Thailand, pp. 300-305.
- Changaival, B, Guinand, F., Danoy, G., Brust, M. R., Kliazovich, D., Musial, J, Lavangnananda, K. and Bouvry, P., 2019, *A Novel Hybrid Metaheuristic Algorithm for Round-trip Carsharing Fleet Planning*, **Proc. of the Genetic and Evolutionary Computation Conference (GECCO 2020)**, 8th – 12th July, Cancun, Mexico.
- Wangsom, P., Lavangnananda, K. and Bouvry, P., 2019, *Multi-Objective Scientific-Workflow Scheduling With Data Movement Awareness in Cloud*, **IEEE Access**, December, 2019, Vol. 7, Issue 1, pp. 177063-177081.
- Wangsom, P. and Lavangnananda, K., 2019, *Multi-Objective Shipment Allocation using Extreme Nondominated Sorting Genetic Algorithm-III (E-NSGA-III)*, **Proc. of the 18th IEEE Int. Conf. on Machine Learning and Applications (ICMLA'19)**, 16th – 19th December, Florida, USA., pp. 1500-1505.
- Phaktana-Udompun, C. and Lavangnananda, K., 2019, *Discovering Highest Density Clusters in a Highly Connected Graph (in Thai)*, **Proc. of the 11th National Conference on Information Technology (NCIT2019)**, 24th – 25th October, Thai-Nichi Institute of Technology, Thailand.
- Changaival, B, Guinand, F., Danoy, G., Brust, M. R., Kliazovich, D., Musial, J, Lavangnananda, K. and Bouvry, P., 2019, *Toward Real-World Vehicle Placement*

- Optimization in Round-Trip Carsharing*, **Proc. of the Genetic and Evolutionary Computation Conference (GECCO 2019)**, 13th – 17th July, Prague, Czech Republic.
- Wangsom, P. and Lavangnananda, K., 2019, *Extreme Solutions NSGA-III (E-NSGA-III) for Multi-Objective Constrained Problems*, **Proc. of the OLA'2019 Int. Conf. on Optimization and Learning**, 29th – 31st January, Bangkok, Thailand.
- Lavangnananda, K. and Panyarit, C., 2019, *Determination of Different Sizes of Partitioning Clusters in a Highly Connected Graph*, 2019, **Proc. of the 11th Int. Conf. on Knowledge and Smart Technology (KST-2019)**, 23rd – 26th January, Phuket, Thailand, pp. 40 - 45.
- Wangsom, P., Lavangnananda, K. and Bouvry, P., 2019, *Multi-Objective Scheduling for Scientific Workflows on Cloud with Peer-to-peer Clustering*, **Proc. of the 11th Int. Conf. on Knowledge and Smart Technology (KST-2019)**, 23rd – 26th January, Phuket, Thailand, pp. 175 – 180.
- Lavangnananda, K., Wangsom, P. and Bouvry, P., 2018, *Extreme Solutions NSGA-III (E-NSGA-III) for Scientific Workflow Scheduling on Cloud*, **Proc. of the 17th IEEE Int. Conf. on Machine Learning and Applications (ICMLA'18)**, 17th – 20th December, Orlando, Florida, USA.
- Rapeepongpan, J., Padungweang, P. and Lavangnananda, K., 2018, *Logistic Principle Component Analysis (L-PCA) for Feature Selection in Classification*, **Proc. of the 2018 14th Int. Conf. on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD 2018)**, 28th – 30th July, Huangshan, China, pp. 779 – 785.
- Changaival, B., Rosalie, M., Danoy, G., Lavangnananda, K. and Bouvry, P., 2017, *Chaotic Traversal (CHAT): Very Large Graphs Traversal Using Chaotic Dynamics*, **Int. J. of Bifurcation and Chaos**, Vol. 27, No. 14, pp 1750215-1 – 1750215-33.
- Wangsom, P., Lavangnananda, K. and Bouvry, P., 2017, *The Application of Nondominated Sorting Genetic Algorithm (NSGA-III) for Scientific-workflow Scheduling on Cloud*, **Proc. of the 8th Multidisciplinary International Conference on Scheduling : Theory and Applications (MISTA 2017)**, 5th – 8th December, Kuala Lumpur, Malaysia.
- Wangsom, P., Lavangnananda, K. and Bouvry, P., 2017, *Measuring Data Locality Ratio in Virtual MapReduce Cluster Using WorkflowSim*, **Proc. of the 14th Int.**

- Conf. on Computer Science and Software Engineering (JCSSE2017)**, 12th – 14th July, Nakhon Si Thammarat, Thailand.
- Lavangnananda, K., and Kankhetr, T., 2017, *HIERARCHICAL CLUSTERING OF M.Sc. STUDENTS : AN IMPROVEMENT TO DIVISIVE ANALYSIS*, **Proc. of the 14th Int. Conf. on Efficiency and Responsibility in Education (ERIE2017)**, 8th – 9th June, Prague, Czech Republic.
- Lavangnananda, K., and Chattanachot, S., 2017, *Study of Discretization Methods in Classification*, **Proc. of the 9th Int. Conf. on Knowledge and Smart Technology (KST-2017)**, 1st - 4th February, Pattaya, Thailand.
- Lavangnananda, K., Smajgl, A. and Babsuk, N., 2016, *Determination of Factors and Characteristics of Change of Profession Attitude Among Mekong Region Population*, **Proc. of the 4th Int. Conf. on Energy, Environment and Sustainable Development (EESD 2016)**, 1st – 3rd November, Jamshoro, Pakistan.
- Changaival, B., Danoy, G., Ostaszewski, M., Lavangnananda, K., Leprevost, F. and Bouvry, B., 2016, *Metaheuristic Based Clustering Algorithms for Biological Hypergraphs*, **Proc. of the META'2016 Int. Conf. on Metaheuristics and Nature Inspired Computing**, 27th - 31st October, Marrakech, Morocco.
- Lavangnananda, K. and Angsuchotmetee C., 2016, *A Study on Suitable Range of Packetization Interval for Streaming Application over WLAN*, **Proc. of the 2016 IEEE Int. Conf. on Industrial Technology (ICIT2016)**, 14th - 17th March, Taipei, Taiwan, pp. 818-823.
- Lavangnananda, K. and Waiwing, S., 2015, *Effectiveness of Different Preprocessing Techniques on Classification of Various Lengths of Control Charts Patterns*, **Proc. of the 7th Int. Conf. on Advances in Information Technology (IAIT2015)**, 23rd - 25th November, Bangkok, Thailand.
- Lavangnananda, K. and Waiwing, S., 2015, *Capability of Control Chart Patterns Classifiers on Various Noise Levels*, **Proc. of the 7th Int. Conf. on Advances in Information Technology (IAIT2015)**, 23rd - 25th November, Bangkok, Thailand.
- Lavangnananda, K. and Poolphol, R., 2014, *A Genetic Algorithm Approach to Partitioning Clustering : A case study on M.Sc. applicants*, **Proc. of the 13th IEEE Int. Conf. on Machine Learning and Applications (ICMLA'14)**, 3rd – 6th December, Detroit, Michigan, USA., pp. 535-540.

- Lavangnananda, K. and Sawasdimongkol, P., 2012, *Utilizing Symbolic Representation in Synergistic Neural Networks Classifier of Control Chart Patterns*, **Proc. of the 19th Int. Conf. on Neural Information Processing (ICONIP2012)**, 12th – 15th November, Doha, Qatar, pp. 313-321.
- Lavangnananda, K. and Panyato, P., 2012, *A diagnosis system for open-source VoIP Software (FreeSWITCH) (Thai Track)*, **Proc. of the 2012 Int. Computer Science and Engineering Conference (ICSEC2012)**, 18th – 19th October, Pattaya, Thailand, pp. 302-307.
- Lavangnananda, K. and Sawasdimongkol, P., 2012, *Neural Network Classifier of Time Series : A Case Study of Symbolic Representation Preprocessing for Control Chart Patterns*, **Proc. of the 2012 8th Int. Conf. on Natural Computation (ICNC2012)**, 29th – 31st May, Chongqing, China, pp. 351-356.
- Piyatumrong, A., Bouvry, P., Guinand, F. and Lavangnananda, K., 2012, *A Multi-Objective Approach for High Quality Tree-based Backbones in Mobile Ad Hoc Networks*, **Int. J. Space Based and Situated Computing**, Vol.2, No. 2, pp. 83-103.
- Lavangnananda, K. and Sawasdimongkol, P., 2011, *Capability of Classification of Control Chart Patterns Classifiers Using Symbolic Representation Preprocessing and Evolutionary Computation*, **Proc. of the 23rd IEEE Int. Conf. on Tools with Artificial Intelligence (ICTAI2011)**, 7th – 9th November, Florida, USA, pp. 1047-1052.
- Lavangnananda, K., Angsuchotmetee, C. and Bouvry, P., 2011, *Effect of Packetization Interval on Number of Connections in AAC Audio Streaming over WLAN 802.11g*, **Proc. of the 17th Asia-Pacific Conference on Communications (APCC2011)**, 2nd – 5th October, Sabah, Malaysia.
- Lavangnananda, K., Yongsakun, K. and Bouvry P., 2011, *Suitable Packetization Interval for using Constrained Energy Lapped Transform (CELT) CODEC in Bi-Directional Communication over WLAN 802.11g*, **Proc. of the 17th Asia-Pacific Conference on Communications (APCC2011)**, 2nd – 5th October, Sabah, Malaysia.
- Lavangnananda, K., Angsuchotmetee, C., Yongsakun, K., Panyato, P. and Sawasdimongkol, P., 2011, *Performance Tradeoff between Mobility and Voice Quality among Different VoIP Deployment Strategies*, **Proc. of the 2011 Int.**

- Conf. on Computer and Communication Devices**, 1st – 3rd April, Bali Island, Indonesia, pp. 158-162.
- Lavangnananda, K. and Kasikitsakulphol, S., 2010, *Systematic Study to Assess Neural Networks' Capability in Classifying Control Chart Patterns*, **Proc. of the 2010 IEEE Int. Conf. on Intelligent Computing and Intelligent Systems (ICIS2010)**, 29th – 31st October, Xiamen, China, Vol. 2, pp. 718-722.
- Piyatumrong, A., Bouvry, P., Guinand, F. and Lavangnananda, K., 2010, *A Multi-objective Approach for High Quality Virtual backbones in Mobile Ad-Hoc Networks*, **Proc. of the 24th European Conference on Operation Research**, 11th – 14th July, Lisbon, Portugal.
- Piyatumrong, A., Ruiz, P., Bouvry, P., Guinand, F. and Lavangnananda, K., 2009, *Token Traversal Strategies of a Distributed Spanning Forest Algorithm in Delay Tolerant MANETs*, **Proc. of the 3rd Int. Conf. on Advances in Information Technology (IAIT2009)**, 2nd – 4th December, Bangkok, Thailand. pp. 96-109.
- Piyatumrong, A., Bouvry, P., Guinand, F. and Lavangnananda, K., 2009, *A Study of Token Circulation Strategies on Tree-Based Backbones for Delay Tolerant MANETs*, **Proc. of the Int. Conf. on Ultra Modern Telecommunications (ICUMT 2009)**, 12th – 14th September, St-Petersburg, Russia.
- Lavangnananda, K. and Maneechan, A., 2009, *A Study of Global and Individuals Transaction Costs in Primitive Trading Clusters*, **Proc. of the 11th Int. Conf. on Computers in Urban Planning and Management (CUPUM)**, 16th – 18th June, The University of Hong Kong, Hong Kong.
- Lavangnananda, K. and Chokepradap, P., 2009, *Improvement to Genetic Algorithm by Using Heuristics in Emergence of Cities (Thai Track)*, **Proc. of the 6th Int. Conf. on Computer Science and Software Engineering (JCSSE2009)**, 13th – 15th May, Phuket, Thailand.
- Piyatumrong, A., Bouvry, P., Guinand, F. and Lavangnananda, K., 2008, *Trusted Spanning Trees for Delay Tolerant MANETs*, **Proc. of the 2008 IEEE/IFIP International Symposium on Trust, Security and Privacy for Pervasive Applications (TSP-08)**, 17th – 20th December, Shanghai, China, pp. 293 – 299.
- Lavangnananda, K. and Wongwattanakarn, C., 2008, *Reducing the Search Space in Genetic Algorithm : An Application in Emergence of Cities*, **Proc. of the 2008 IEEE Conference on Soft Computing in Industrial Applications (SMCia/08)**,

- 25th – 27th June, Mororan, Japan.
- Piyatumrong, A., Bouvry, P., Guinand, F. and Lavangnananda, K., 2008, *Trusted Spanning Trees for Delay Tolerant Mobile Ad Hoc Networks*, **Proc. of the 2008 IEEE Conference on Soft Computing in Industrial Applications (SMCia/08)**, 25th – 27th June, Mororan, Japan.
- Lavangnananda, K. and Wongwattanakarn, C., 2007, *Utilizing Symbolic Representation and Evolutionary Computation in Classification of Control Chart Patterns*, **Proc. of the 2007 IEEE Three-Rivers Workshop on Soft Computing in Industrial Applications (SMCia/07)**, 1st – 3rd August, Passau, Germany, pp. 79-84.
- Lavangnananda, K. and Wongwattanakarn, C., 2007, *The Effects of Different Initial Setups and Computation on Simulation of Emergence of Cities*, **Proc. of the 10th Int. Conf. on Computers in Urban Planning and Management (CUPUM'07)**, 11th – 13th July, Iguassu Falls, Brazil.
- Sombudh, A., Wongwattanakarn, C. and Lavangnananda, K., 2007, *Application of Backward Chaining in Assessing the Suitability in Mutual Funds Investment (Thai Track)*, **Proc. of the 4th Int. Conf. on Computer Science and Software Engineering (JCSSE2007)**, 2nd – 4th May, Khon Kaen, Thailand, pp. 369-374.
- Lavangnananda, K., Wongwattanakarn, C., Piyatumrong, A., and Sombudh, A., 2006, *Advisory System for Investment in Mutual Fund*, **Proc. of National Computer Conference on Information Technology (NCIT2006)**, 2nd – 3rd November, Bangkok, Thailand, pp. 40 – 48.
- Lavangnananda, K., Yamsaengsung, S. and Wongwattanakarn, C., 2006, *Simulation of the effect of initial setups to the emergence of cities*, **Proc. of the 2006 National Applied Statistics Conference**, 10th – 11th August, Bangkok, Thailand., pp. 297 – 306.
- Lavangnananda, K., 2006, *Self-adjusting Associative Rules Generator for Classification : An Evolutionary Computation Approach*, **Proc. of 2006 IEEE Mountain Workshop on Adaptive and Learning Systems (SMCals/06)**, 24th – 26th July, Utah, USA., pp. 237 – 242.
- Lavangnananda, K. and Phrueksanant, J., 2005, *Feed Forward Network or Recurrent Network : The Competent Structure for Time-Series Classification*, **Proc. of 9th National Computer Science and Engineering Conference (NCSEC 2005)**, 27th - 28th October, Bangkok, Thailand, pp. 924 – 935.

- Piyatumrong, A. and Lavangnananda, K., 2005, *Application of Image Processing Features Extraction in Classification of Different Types of Time-Series*, **Proc. of 9th National Computer Science and Engineering Conference (NCSEC 2005)**, 27th – 28th October, Bangkok, Thailand, pp. 915 - 924.
- Lavangnananda, K. and Piyatumrong, A., 2005, *Image Processing Approach to Features Extraction in Classification of Control Chart Patterns*, **Proc. of 2005 IEEE Mid-Summer Workshop on Soft Computing in Industrial Applications (SMCia/05)**, 28th – 30th June, Espoo, Finland, pp. 85 - 90.
- Lavangnananda, K. and Piyatumrong, A., 2004, *Utilizing Features Extraction in Classifying Control Chart Signals : A Synergistic Neural Networks Approach*, **Proc. of Int. Conf. on Advances in Intelligent Systems - Theory and Applications (AISTA2004)**, 15th – 18th November, Luxembourg.
- Lavangnananda, K., Piyatumrong, A. and Nakkathon, A., 2004, *Utilizing Features Extraction in Classifying Control Chart Patterns using Neural networks*, **Proc. of 8th National Computer Science and Engineering Conference (NCSEC 2004)**, 21st – 22nd October, Songkhla, Thailand, pp. 41-48.
- Lavangnananda, K., 2004, *A Genetic Programming Approach to Inductive Learning*, **Proc. of the Int. Conf. Computational Intelligence for Modelling, Control and Automation (CIMCA'2004)**, 12th – 14th July, Gold Coast, Australia, pp. 279-290.
- Lavangnananda, K. and Nakkathon, A., 2003, *Improving Features Extraction in Control Chart Patterns*, **Proc. of 7th National Computer Science and Engineering Conference (NCSEC 2003)**, 28th – 30th October, Burapha University, Thailand, pp. 364-369.
- Lavangnananda, K. and Rattagan, E., 2003, *Adaptive Genetic Programming for Inductive Learning (Adaptive GPIL)*, **Proc. of 7th National Computer Science and Engineering Conference (NCSEC 2003)**, 28th – 30th October, Burapha University, Thailand, pp. 243-248.
- Lavangnananda, K. and Tengsriprasert, O., 2003, *Training Neural Networks Under Limited Number of Samples by Evaluating Significance Value*, **Proc. of 7th National Computer Science and Engineering Conference (NCSEC 2003)**, 28th - 30th October, Burapha University, Thailand, pp. 353-358.
- Lavangnananda, K. and Tengsriprasert, O., 2002, *Classification of Time Series Data : A Synergistic Neural Networks Approach*, **Proc. of the 9th Int. Conf. on Neural**

- Information Processing (ICONIP'02)**, 18th – 22nd November, Singapore, Vol. 1, pp. 179-183.
- Phruksanant, J. and Lavangnanada, K., 2002, *Classification of Student's Performance Using Qualitative Attributes : A comparative study between statistical and artificial intelligence techniques*, **Proc. of 6th National Computer Science and Engineering Conference (NCSEC 2002)**, 29th – 31st October, Pattaya, Thailand, pp. 291-296.
- Lavangnananda, K. and Phruksanant, J., 2002, *Synergistic Approach to Time Series Forecast Using Neural Networks*, **Proc. of the 4th Int. Workshop on Computer Science and Information Technologies**, 18th – 20th September, Patras, Greece.
- Lavangnananda, K., 2002, *Overcoming limited samples and ambiguity in classification using neural networks : A Synergistic Approach*, **Proc. of the 3rd WSEAS Int. Conf. on Neural Networks and Applications (NNA'02)**, 12th – 14th February, Interlaken, Switzerland, pp. 101-106.
- Lavangnanada, K. and Na-Songkha, P., 2001, *Inductive Learning in Classification : A Genetic Programming Approach*, **Proc. of 5th National Computer Science and Engineering Conference (NCSEC 2001)**, 7th – 9th November, Chiangmai University, Thailand, pp. 30-38.
- Lavangnananda, K., 2001, *Qualitative Approach to Function Based Simulation : A case study in water conservancy system of Ayuddhaya*, **Proc. of the IASTED Int. Conf. on Applied Simulation and Modelling**, 4th – 7th September, Marbella, Spain, pp. 99-104.
- Lavangnananda, K., 2001, *Synergistic Genetic Algorithm for Inductive Learning (SynGAIL)*, **Proc. of the Int. ICSC Congress on Computational Intelligence : Methods and Applications (CIMA'2001)**, 19th – 22nd June, University of Wales Bangor, U.K., pp. 443-449.
- Lavangnanada, K. and Jarassupawat, R., 2001, *Application of Genetic Algorithms for Inductive Learning (GAIL) in Classification*, **Thai Journal of Development Administration**, Vol. 41, No. 3, pp. 69-82.
- Lavangnanada, K. and Ninrutsirikun, U, 2001, *Application of Synergistic Neural Networks in Data Classification*, **KMUTT Research and Development Journal**, Vol. 24, No. 2, May – August 2001, pp. 179-192.
- Lavangnananda, K., 2000, *QUALITY V.S. QUANTITY : Experience from School of Information Technology*, **KMUTT**, **Proc. of the Int. Symposium on A Blueprint**

- for Better Graduate Studies (GRAD-BLUEPRINT 2000)**, 22nd – 24th November, Phuket, Thailand, pp.88-97.
- Lavangnanada, K. and Phruksanant, J., 2000, *Structural Competency of Neural Networks in Temperature Forecast*, **Proc. of 4th National Computer Science and Engineering Conference (NCSEC 2000)**, 16th – 17th Nov., Bangkok, Thailand, pp. 174-181.
- Lavangnananda, K., 2000, *Reasoning Beyond its Domain : Qualitative Simulation of Mechanisms*, **Proc. of the IASTED Int. Conf. on Applied Simulation and Modelling**, 24th – 26th July, Banff, Canada, pp. 156-161.
- Lavangnanada, K., 2000, *Expert System in Plant Taxonomy*, **KMUTT Research and Development Journal**, Vol. 23, No. 1, January – April 2000, pp. 29-42.
- Lavangnanada, K. and Phruksanant, J., 1999, *Competency of Neural Networks in Forecast Using Highly Fluctuated Data*, **Proc. of The National Computer Science and Engineering Conference (NCSEC'99)**, 16th – 17th December, Thailand, pp. 39-45.
- Lavangnanada, K. and Sriprapaipongshal, S., 1999 *Expert System in First Aid*, **Thailand Engineering Journal**, Vol. 52, Issue 5, May 1999, pp. 78-82.
- Lavangnanada, K., 1998, *Expert System in Credit Banking Evaluation*, **Proc. of The National Computer Science and Engineering Conference (NCSEC'98)**, 19th - 21st October, Bangkok, Thailand.
- Lavangnananda, K., 1997, *The English-Thai communication gap and informal learning*, **The English Teacher : An International Journal**, Vol.2, No.2, pp.20-25.
- Lavangnananda, K., and Webster, C., 1996, *Reengineering Thai Research Students*, **Proc. of Int. Conf. on Reengineering The University : Opportunities and Challenges**, 21st – 22nd March, Bangkok, Thailand, pp. 62-68.