

Curriculum Vitae

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CURRENT POSITION

Assistant Professor in the Department of Industrial Engineering, Faculty of Engineering, Kasetsart University

RESEARCH INTERESTS

Design and analysis of computer simulation experiments on models of stochastic systems, particularly issues related to statistical efficiency of simulation experiments. Application interests include manufacturing and service systems.

EDUCATION

Ph.D. (March 2002), M.S. (July 1998), Industrial Engineering and Management Sciences, Northwestern University, Evanston, Illinois, U.S.A.

Concentration: Ranking and Selection Procedures and Optimization via Simulation

Dissertation Title: A Combined Procedure for Optimization via Simulation

Advisor: Barry L. Nelson, Professor

M.S. (December 1996), Chemical Engineering, University of Washington, Seattle, Washington, U.S.A.

B.S. (May 1995), Chemical Engineering, Cornell University, Ithaca, New York, U.S.A.

PROFESSIONAL EXPERIENCE (UNIVERSITY)

Assistant Professor, Department of Industrial Engineering, Faculty of Engineering, Kasetsart University, Bangkok, Thailand (October 2005–present).

Exchanged Lecturer, Department of Productions, University of Vaasa, Vaasa, Finland (last visited: February 2013).

Lecturer, Department of Industrial Engineering, Faculty of Engineering, Kasetsart University, Bangkok, Thailand (June-September 2002, September 2003–October 2005).

Postdoctoral Fellow, University of Montreal, Montreal, Canada (September 2003–September 2004).

REFERRED PUBLICATIONS

- Noocharin Tippayawannakorn and Jutta Pichitlamken. 2013. Nelder-Mead Method with Local Selection Using Neighborhood and Memory for Stochastic Optimization. *Journal of Computer Science*, 9(4): 463-476, ISSN 1549-3636.
- Waersara Weerawat, Jutta Pichitlamken and Peerapong Subsombat. 2013. A Generic Discrete-Event Simulation Model for Outpatient Clinics in a Large Public Hospital. *Journal of Healthcare Engineering*, 4(2): 285-305, ISSN 2040-2295.
- Kongkaew W., and J. Pichitlamken. 2012. A Gaussian Process Regression Model for the Traveling Salesman Problem. *Journal of Computer Science*, 8(10): 1749–1758, ISSN 1549-3636.
- Kaewpuang R., P. Uthayopas, G. Srimool, and J. Pichitlamken. 2011. Building a Service Oriented Cloud Computing Infrastructure Using Microsoft CCR/DSS System. *Journal of Next Generation Information Technology*, 2(1): 66–80.
- Pichitlamken, J., S. Kajkamhaeng, P. Uthayopas, and R. Kaewpuang. 2011. High Performance Spreadsheet Simulation on a Desktop Grid. *Journal of Simulation*, 5, 266-278, doi:10.1057/jos.2010.23.
- Pichitlamken, J., and K. Chengprasoetsri. 2007. Predicting Weight and Production Times of Plastic Injection Parts by Linear Regression. *Journal of Research in Engineering and Technology: A Publication of Faculty of Engineering, Kasetsart University, Thailand*, 4(2): 125–136.
- Phusavat, K., P. Anussornnitisarn, and J. Pichitlamken. 2007. Benefit and Cost Analysis for E-learning for Knowledge Management: The Royal Thai Government. *International Journal of Knowledge Management Studies: Special Issue on Information Technology and Telecommunications Services—Knowledge, Technology and Organisational Changes*, 1(3/4):368–387.
- Deslauriers, A., P. L’Ecuyer, J. Pichitlamken, A. Ingolfsson and A. N. Avramidis. 2007. Markov chain models of a telephone call center with call blending. *Computers & Operations Research*, 34 (6), 1616-1645.
- Pichitlamken, J., B. L. Nelson, and L. J. Hong. 2006. A sequential procedure for neighborhood selection-of-the-best in optimization via simulation. *European Journal of Operational Research*, 173(1):283–298.
- Pichitlamken, J., and B. L. Nelson. 2003. A combined procedure for optimization via simulation. *ACM Transactions on Modeling and Computer Simulation*, 13(2):155–179.
- Van Oyen, M. P. and J. Pichitlamken. 2000. Optimal Expected Flowtime Policies with a Makespan Constraint and Set-up Times. *Manufacturing and Service Operations Management*, 2:84–99.

PROCEEDING PAPERS (ENGLISH)

- Luangmul K., J. Pichitlamken, and W. Weerawat. 2012. A simulation model of a hospital’s clinical laboratory. In *Proceedings of the 4th International Conference on Applied Operational Research*, 64–69. Bangkok, Thailand. July 25-27, 2012.
- Vittawasakul J., and J. Pichitlamken. 2012. Planning of work schedules for toll booth collectors. In *Proceedings of the 4th International Conference on Applied Operational Research*, 116–124. Bangkok, Thailand. July 25-27, 2012.
- Wongsammacheep T., J. Pichitlamken, and W. Weerawat. 2012. The discrete-event simulation model of a health screening center. In *Proceedings of the 4th International Conference on Applied Operational Research*, 54–63. Bangkok, Thailand. July 25-27, 2012.
- Wanatchapong K., and J. Pichitlamken. 2012. Empirical Study of Optimal Prediction of Traveling Salesman Problem Using Gaussian Process Regression. In *Proceedings of the 8th International Conference on Intelligent Manufacturing & Logistics Research*, 268–274. Ubonratchatani, Thailand. February 18-22, 2012.
- Kachawong U., and J. Pichitlamken. 2011. A Simple Multi-Criteria Selection Model to Set Boundary Sample for Auto Parts. In *International Proceedings of Economics Development and Research: Management and Service Science*, 53–57. Bangkok, Thailand. May 28-29, 2011. ISBN 978-981-08-8868-8.
- Chantapanich, J., and J. Pichitlamken. 2011. Solving the Traveling Salesman Problem with Gaussian Process Regression. In *Proceedings of the 7th International Conference on Computing and*

- Information Technology (IC²IT 2011)*, 42–46. Bangkok, Thailand. May 11-12, 2011.
- Chaokongjak, J., and J. Pichitlamken. 2010. Integrating Discrete-Event Simulation with Activity-Based Costing for Process Improvement: FPCA Manufacturing System. In *Proceedings of the Fourth International Conference on Modelling and Simulation (ICMS2011)*, Volume 1, 7–11. Phuket, Thailand, April 25-27, 2011. ISBN: 978-1-84626-069-8.
- Katetubtim, S., and J. Pichitlamken. 2010. A Simulation Model of a Pull Production System for a Flexible PCB Assembly Line. In *Proceedings of the 2nd National Conference on Thai Simulation and Modeling (TSIMMOD 2010)*, 230–236. Pattaya, Thailand.
- Kaewpuang, R. , P. Uthayopas, J. Pichitlamkhen, and G. Srimool. 2009. Building a Service Oriented Cloud Computing Infrastructure using Microsoft CCR/DSS System. In *ICCIT '09: Proceedings of the 2009 Fourth International Conference on Computer Sciences and Convergence Information Technology*, 812–817. Washington, DC, USA: IEEE Computer Society.
- Kaewpuang, R., P. Uthayopas, K. Boonmee, and J. Pichitlamkhen, 2009. Developing a scalable high performance application on multicore clustering system using Microsoft CCR/DSS system,” In *ICICS'09: Proceedings of the 7th international conference on Information, communications and signal processing*, 794–798. Piscataway, NJ, USA: IEEE Press.
- Pichitlamken, J., S. Kajkamhaeng, and P. Uthayopas. 2008. High Performance Spreadsheet Simulation on a Desktop GRID. In *Proceedings of the 2008 Winter Simulation Conference*, ed. S. J. Mason, R. R. Hill, L. Moench, O. Rose, T. Jefferson, and J.W. Fowler, 663–670. Piscataway, New Jersey: Institute of Electrical and Electronics Engineers.
- Apiwattanachai T., and J. Pichitlamken. 2008. Time-Series Forecasting Model for Automobile Sales in Thailand. In *Proceedings of the 5th National Conference on Operations Research*, ed. King Mongkut’s University of Technology North Bangkok, 298–302. Bangkok, Thailand.
- Kittisatien, N. and J. Pichitlamken. 2008. Development of a Stochastic Simulation Software for What-If Analysis in a Hard Drive Production Process. In *Proceedings of the Modeling and Simulation Society of Thailand Conference*, 255–264. Bangkok, Thailand.
- Pichitlamken, J., P. Uthayopas, S. Kajkamhaeng, and N. Tippayawannakorn. Service-Oriented Architecture on a Windows Cluster for Spreadsheet Simulation. In *Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)*, 1751–1761, Singapore.
- Khumwan, N. and J. Pichitlamken. 2007. Sensitivity Analysis of the Bullwhip Effect in a Three-level Supply Chain with Stochastic Demands and Lead times. In *Proceedings of the 2nd International Conference on Operations and Supply Chain Management*, ed. U. Laptaned, 129–136. Bangkok, Thailand.
- Tippayawannakorna, N., and J. Pichitlamken. 2007. Random Search Methods for Large-Scale Optimization via Simulation Problems. In *Proceedings of the 2nd International Conference on Asian Simulation Modeling*, ed. B. Ekasingh, A. Jintrawet and S. Pratummintra, 202–209. Chiang Mai, Thailand.
- Anussornnitisarn P., K. Phusavat, J. Pichitlamken, M. Naaranoja, and J. Takala. 2006. Proposed Benefit and Cost Analysis Framework on E-Learning: Case Study for the Public Sector in Thailand. In *Proceedings of the Portland International Center for Management of Engineering and Technology (PICMET)'06 Conference*. Istanbul, Turkey.
- Rojanapanpat T., P. Uthayopas, S. Chaisiri, J. Pichitlamken, S. Phakhawirotkul, and T. Vorakosit. 2005. Implementing a distributed high volume risk analysis software on PC farm using OpenUCI system. In *Proceedings of the 9th National Computer Science and Engineering Conference (NCSEC)*. Bangkok, Thailand: University of the Thai Chamber of Commerce.
- Chaisiri S., J. Pichitlamken, P. Uthayopas, T. Rojanapanpat, S. Phakhawirotkul, and T. Vorakosit. 2005. Applying web services and windows clustering for high volume risk analysis. In *Proceedings of the 8th International Conference on High Performance Computing in Asia Pacific Region (HPCASIA)*, ed. J. Fan, and J. Lee, to appear. Beijing, China: Institute of Computer Technology, Chinese Academy of Sciences.
- Rojanapibul K. and J. Pichitlamken. 2005. Assessing risk in a job schedule: Integrating a scheduling heuristic and a simulation model to a spreadsheet. In *Proceedings of the 2005 Winter*

- Simulation Conference*, ed. M. E. Kuhl, N. M. Steiger, F. B. Armstrong, and J. A. Joines, 2136–2140. Piscataway, New Jersey: Institute of Electrical and Electronics Engineers.
- Pichitlamken, J. 2005. Optimizing a call center simulation model. In *Simulation and Modeling: Integrating Sciences and Technology for Effective Resource Management*, ed. V. Kachitvichyanukul, U. Purintrapiban, P. Utayopas, 17–22. Bangkok, Thailand: Asian Institute of Technology, ISBN 974-8208-57-5.
- Pichitlamken, J., A. Deslauriers, P. L’Ecuyer, and A. N. Avramidis. 2003. Modeling and simulation of a telephone call center. In *Proceedings of the 2003 Winter Simulation Conference*, ed. S. Chick, P. J. Sánchez, D. Ferrin, and D. J. Morrice, 1805–1812. Piscataway, New Jersey: Institute of Electrical and Electronics Engineers.
- Pichitlamken, J., and B. L. Nelson. 2002. A combined procedure for optimization via simulation. In *Proceedings of the 2002 Winter Simulation Conference*, ed. E. Yucësan, C.-H. Chen, J. L. Snowdon and J. M. Charnes, 292–300. Piscataway, New Jersey: Institute of Electrical and Electronics Engineers.
- Pichitlamken, J., and B. L. Nelson. 2001. Selection-of-the-best Procedures for Optimization via Simulation. In *Proceedings of the 2001 Winter Simulation Conference*, ed. B. A. Peters, J. S. Smith, D. J. Medeiros, and M. W. Rohrer, 401–407. Piscataway, New Jersey: Institute of Electrical and Electronics Engineers.

PROCEEDING PAPERS (THAI)

- Palapan S., and J. Pichitlamken. 2012. Improvement of Storage Layout for Operational Efficiency in Goods Receiving and Goods Shipping Process: Case Study of Dairy Milk Storage. In *Proceedings of the Industrial Engineering Network Conference*, 1960–1968. Petchburi, Thailand, ISBN: 978-974-655-447-3.
- Junnoi, K., J. Pichitlamken, and C. Singhtaun. 2011. Determining Truck Bed Liner Distribution Center Locations Using Simulation Techniques. In *Proceedings of the Industrial Engineering Conference, the Engineering Institute of Thailand*, 171–178. Bangkok, Thailand.
- Layarom, P., and J. Pichitlamken. 2010. System Dynamics Models for AIDS Infection in Thailand. In *Proceedings of the Operations Research Network of Thailand*, 273–281. Bangkok, Thailand.
- Pichitlamken, J., and S. Somjintana. 2010. Design of experiments to improve aircraft tires’ weight balance. In *Proceedings of the IE Network Conference*. Ubonratchathani, Thailand.
- Yingsoong, M., and J. Pichitlamken. 2007. Reduction of Customer Waiting Times at Teller Counters in a Commercial Bank. In *Proceedings of the Operations Research Network of Thailand*, 293–306. Bangkok, Thailand.
- Maneesri, S., and J. Pichitlamken. 2006. Comparison of Methods Used in Achieving Semi-Definiteness of Covariance Matrices: A Case Study of Rate of Returns of Stocks Traded in the Stock Exchange of Thailand. In *Proceedings of the 2006 OR-CRN Conference* Bangkok, Thailand: Chulalongkorn University.
- Nuemsorn, P., and J. Pichitlamken. 2005. Development of a vendor managed inventory software for liquid/powdery goods. In *Proceedings of the 2005 IE Network Conference*, ed. P. Suteecharuwat and W. Thammapornpilat. Bangkok, Thailand: Chulalongkorn University.

GENERAL ARTICLE (THAI)

- Pichitlamken, J. 2005. George B. Dantzig: Father of Linear Programming. *Engineering Journal of Kasetsart University* (ISSN 0857-4154), 54-55: 146–151.

PROFESSIONAL AFFILIATION

The Engineering Institute of Thailand under H.M. The King’s Patronage (E.I.T.).

SPONSORED RESEARCH

“International Healthcare Service Supply Chain and Logistics Management,” PI: Waresara Weerawat. Commission of the Higher Education and National Research Council of Thailand, 2011-2013.

“Design of Experiments to Study Factors that Affect the Number of Defects in Filling and Sealing Operation of Packaged Mineral Salt,” Grant Number I252A09030, Industrial and Research Projects for Undergraduate Students (IRPUS2), the Thailand Research Fund, 2009-2010.

“Development of a Scheduling Rule for Automobile Door Check Production and Verification with Computer Simulation,” Grant Number I251A09015, Industrial and Research Projects for Undergraduate Students (IRPUS2), the Thailand Research Fund, 2008-2009.

“Design and Development of Stochastic Simulation Tool for Spreadsheet (S3),” Grant Number MRG4980121, Commission of the Higher Education and the Thailand Research Fund, 2007-2008.

“Change Management Leadership Workshop,” Office of the Public Sector Development Commission Grant (Office of the Prime Minister, the Royal Thai Government), with K. Phusawat and P. Anussornnitisarn, 2005.

“Readiness Assessment and Cost Effectiveness Study of Deploying e-Learning for Thai Civil Servants,” Office of the Public Sector Development Commission Grant (Prime Minister’s Office, the Royal Thai Government), with K. Phusawat and P. Anussornnitisarn, 2005.

“Value at Risk (VaR) Calculation Tool for Excel,” the Thai Bond Dealing Center Grant, with P. Uttayopas and P. Anussornnitisarn, 2005.

“Logistics Management System of Bulk Materials using Wireless Sensing Device,” Kasetsart University Research and Development Institute Grant (Category: Strengthening Research Potentials) No. S-K (WS) 15.46 (2003-2004), with A. Mungwattana and P. Anussornnitisarn.

“Development of Stochastic Simulation Library in C++,” Faculty of Engineering (Kasetsart University) Grant No. 47/06/IE (2004-2005).

PRESENTATIONS

“System Dynamics for Healthcare Applications”, Healthcare Management Engineering Workshop, organized by Cluster of Enhancing Competitive Advantage of Healthcare Service in Thailand and GS1 Thailand (under the Federation of Thai Industries), Mandarin Oriental Hotel, Bangkok, Thailand (March 30, 2011).

“Tutorials on the Gaussian Random Process and its OR Applications,” Operations Research Network of Thailand (OR-NET 2009), organized by Department of Industrial Engineering, Faculty of Engineering, Srinakharinwirot University, University, Bangkok, Thailand (September 3, 2009).

“Overview on optimization tools for stochastic discrete-event simulation,” Colloquium on Technology, University of Vaasa, Finland (November 10, 2005).

“High-Performance Computing in Financial Engineering: Case study,” Microsoft High Performance Computing Technology: Technical Update #1 Conference, organized by the High Performance Computing and Networking Center of Kasetsart University, Kasetsart University, Bangkok, Thailand (October 28, 2005).

“Roles of High-Performance Computing in Financial Engineering,” Thai Grid and Cluster Computing Conference, the Sofitel Central Plaza Hotel, Bangkok, Thailand (September 1,

2004).

AWARDS AND SCHOLARSHIPS

Advisor for Student Teams Winning the First and the Second Prizes, ARENA Simulation Contest 2008, Thailand, organized by M-Focus and Rockwell Software.

Honorable Mention, the George B. Dantzig Dissertation Award, Institute for Operations Research and the Management Sciences (INFORMS), 2002.

Scholarship, The Royal Thai Government (1990-1997).

Dean's Honor List at Cornell University (1991-1995).

Awarded a membership in Tau Beta Pi, a national honorary engineering society (1995).

SERVICES

Reviewing Committee, the 11th Statistics and Applied Statistics Conference, Chiangmai, Thailand (May 27-29, 2010).

Technical Committee Chair, Asian Simulation and Modeling Conference 2009, Miracle Grand Hotel, Bangkok, Thailand (January 22-23, 2009).

Latex Editing Committee of the 2005 Winter Simulation Conference Proceedings, Orlando, Florida.

Organizing Committee Chair, Financial Engineering on Computational Clusters Seminar, the Novotel Bangkok at Siam Square, Bangkok, Thailand (October 21, 2004).

ThaiGrid Committee (2004-2006)

Referee for *The 2006 Winter Simulation Conference*, *INFORMS Journal on Computing*, *Operations Research*, *Industrial Engineering and Management Systems*, *EIT International Journal of Engineering Technology*, and *Kasetsart University: Engineering Journal* (in Thai).

LOCAL SERVICE (KASETSART UNIVERSITY)

The International Graduate Program in Industrial Engineering Committee (February 19, 2004–May 31, 2010)

The Student Affair Committee, Department of Industrial Engineering, Faculty of Engineering (September 2004–March 2006).

COURSES TAUGHT

206223 Applied Statistics for Industrial Engineers

206321 Operations Research I

206531 Engineering Stochastic Processes

206534 Simulation Modeling

206513 Applied Quantitative Sciences in Industrial Engineering

206543 Applied Statistics in Quality Control

206631 Advanced Engineering Stochastic Processes

222511 Applied Probability and Statistics for Engineers