**TANUCHPORN WONGWIEN**



Address: 415 M.1 Putharaksa Rd., Meung, Samutprakarn, Thailand

Email: w.tanuchporn@gmail.com

Mobile: +669 0912 2772

**EDUCATION**

**Philosophy’s Degree** July 2012 - Present

**Thammasat University** (Expected Graduation: 2016)

Sirindhorn International Institute of Technology (SIIT)

Major: Engineering Management (EM)

Research Topic: Multiobjective Workforce Scheduling with Combined

Safety, Productivity, and Job Satisfaction Consideration

**Master’s Degree** May 2010 - June 2012

**Thammasat University**

Sirindhorn International Institute of Technology (SIIT)

Major: Engineering Management (EM)

Research Topic: Multiobjective Workforce Scheduling under Worker

and Workstation Constraints

**Bachelor’s Degree** May 2006 – March 2010

**King Mongkut’s University of Technology North Bangkok**

Faculty of Engineering

Major: Industrial Engineering (IE) GPA 3.89

Senior Project: Productivity Improvement for the Master Production Scheduling

A case study of Siam Steel International Co., Ltd.

**Vocational Certificate** May 2003 – March 2006

**King Mongkut’s University of Technology North Bangkok**

College of Industrial Technology

Major: Technical Education (Electrical and Electronics) GPA 3.83

**RESEARCH AREA**

Workforce Scheduling, Ergonomic Hazard Management, Multiobjective Optimization, Multiobjective Genetic Algorithms

**PUBLICATIONS**

**International Journals:**

Wongwien, T. and Nanthavanij, S. (2012) “Ergonomic Workforce Scheduling under Complex Worker Limitation and Task Requirements: Mathematical Model and Approximation Procedure”. *Songklanakarin Journal of Science and Technology*,34(5), 541-549.

Wongwien, T. and Nanthavanij, S. (under review) “Multiobjective Ergonomic Workforce Scheduling under Complex Worker and Task Constraints”. *International Journal of Industrial Engineering: Theory, Application and Practice*.

Wongwien, T. and Nanthavanij, S. (under review) “Priority-based Ergonomic Workforce Scheduling for Industrial Workers Performing Hazardous Jobs”. *Journal of Industrial and Production Engineering.*

**International Conferences:**

Wongwien, T. and Nanthavanij, S. “Ergonomic Workforce Scheduling with Productivity and Employee Satisfaction Consideration”. *The 4th International Conference on Engineering, Project, and Production Management*, Bangkok, Thailand, October 2013.

Wongwien, T., Rattanamanee T., and Nanthavanij, S. “Multi-Workday, Multi-Objective Ergonomic Workforce Scheduling for Warehouse Tasks”. *The 8th International Congress on Logistics and SCM Systems*, Tokyo, Japan, August 2013.

Wongwien, T. and Nanthavanij, S. “Ergonomic Workforce Scheduling for Noisy Workstations with Single or Multiple Workers per Workstation”. *The Second International Conference on Interdisciplinary Research and Development*, Bangkok, Thailand, May 2012.

**National Conference:**

Wongwien, T. and Nanthavanij, S. “Hybrid Genetic Algorithm Approach to Multiobjective Workforce Scheduling with Complex Worker and Task Constraints”. *National Operation Research Conference,* Bangkok, Thailand, September 2012.

**WORK IN PROGRESS MANUSCRIPTS**

**International Journals:**

Wongwien, T. and Nanthavanij, S. “Computerized Approach to Developing Safe Daily Rotating Work Schedules for Noise Exposure Reduction” *International Journal of Occupational Safety and Ergonomics.*

Wongwien, T. and Nanthavanij, S. “Hybrid Genetic Algorithm Approach to Multiobjective Workforce Scheduling with Complex Worker and Task Constraints”. *International Journal of Industrial Engineering: Theory, Application and Practice*.

Wongwien, T. and Nanthavanij, S. “Goal Programming Approach for Multiobjective Ergonomic Workforce Scheduling Combined Productivity and Job Satisfaction”. *European Journal of Operational Research.*

Wongwien, T. and Nanthavanij, S. “Productivity and Satisfaction Based Evaluation of Ergonomic Schedules with Varying Workforce Size”. *Songklanakarin Journal of Science and Technology.*

Wongwien, T. and Nanthavanij, S. “Preemptive Genetic Algorithm for Multiobjective Ergonomic Workforce Scheduling under Complex Worker and Task Constraints”. *European Journal of Operational Research.*

Wongwien, T. and Nanthavanij, S. “Non-preemptive Genetic Algorithm for Multiobjective Ergonomic Workforce Scheduling under Complex Worker and Task Constraints”. *International Journal of Industrial Engineering: Theory, Application and Practice*.

**SCHOLARSHIP**

**The Thailand Research Fund (TRF)** June 2010 – Present

The Royal Golden Jubilee (RGJ-PHD Grant No. PHD/0329/2551)

**WORK EXPERIENCES**

**Private Tutor** October 2011 – Present

– Teach Maths and Physics in the international and national programs

**Siam Michelin Co.,Ltd**, Nongkae, Saraburi March 2009 – May 2009

Yod Nak Kid with Michelin (IE project), Bladder assembly post, Curing BU

– Set up standard: time, flow process chart, flow diagram of material, simogram

– Flow analysis: re-layout and identify FIFO system of store B/D, flow improvement

– Optimized workload and improved capacity (2 manpower saving with no investment)

**Industrial Engineering Department**, KMUTNB May 2007 – March 2010

– Established systematic student database in Industrial Engineering Department

**TAE-Tutor** **Academy**, Bangsue, Bangkok October 2007 – August 2008

Physics and Maths tutor

– Taught Physics I and Physics II in Bachelor’s degree as main tasks

– Learnt how to plan and manage organization

**KUMON**, Charansanithwong 77, Bangsue, Bangkok April 2006 – September 2007

Assistant instructor

– Taught English in fundamental levels

– Improved communication skills: contact with parents for keeping good relation and providing orientations for their children

**Student Club of KMUTNB**, Bangsue, Bangkok October 2005 – April 2006

Server

– Developed a better understanding of the psychology of labor

**PERSONAL SKILLS**

**English**: Good

**Computer Literacy**:

– Microsoft Office: Word, Excel (proficient), PowerPoint, Project, Visio, Access

– Minitab, Promodel, Solidworks, Java, Visual basics

– ILOG CPLEX, LINGO, MATLAB,