Curriculum Vitae

Personal Information

Sergey KOVALEV
Office address : 25, rue de l'Université
69007 Lyon, France
Email : skovalev@inseec.com
Phone number : +33 (0) 4 78 29 80 28
CV updated on : 10/10/2018

Academic positions and industry employment

October 2014 - present. INSEEC Business School, Lyon, France.

July 2018 - present. Associate professor.

October 2014 - Juin 2018. Assistant professor.

Teaching :
- Supply Chain Management ;
- Inventory Management ;
- Industrial Logistics ;
- International purchasing ;
- Optimization methods for managers (online).

Research in :
- Combinatorial optimization ;
- Logistics ;
- Industrial Engineering.

October 2013 - August 2014. IFSTTAR - The French Institute of Science and Technology for Transport, Development and Networks, Bron, France.

Research engineer (post-doc).

Development of new multimodal shortest paths algorithms integrating multi-objective aspects.

April 2013 - September 2013. ARMINES - Association pour la Recherche et le Développement des Méthodes et Processus Industriels, Saint-Etienne, France.

Research engineer (post-doc).

Development of effective solution methods for the configuration of assembly lines of the German company MBTech Group within the framework of the FP7 European project amePLM.

October 2012 - March 2013. University of Bordeaux 1, Institute of Mathematics, France.

Temporary teacher.

Preparation and realization of courses and practical lessons for Master students (MIMSE) in the following disciplines :
- Operations management and production planning ;
- Stochastic optimization ;
- Inventory management and queuing theory.

2009-2012. École Nationale Supérieure des Mines de Saint-Étienne, France.

Researcher.

Development and application of optimization methods and computational complexity analysis for production line configuration problems.

Teacher.

Preparation and realization of practical lessons for engineering students (Cycle Ingénieur Civil des Mines) in the following disciplines :
- Operations research ;
- Numerical methods.

2009. Triangel AS, Molde, Norway.

Project developer.

Creation of a mathematical model for the optimization of teachers replacements in the education sector in case of their vacations/sickness.

2007. Belmultitrans Ltd, Minsk, Belarus.

International economic activity specialist.

Development of the cargo transportation database, financial analysis, control of heavy vehicle fuel consumption, accounting.

2007. Belarusian National Technical University, Minsk, Belarus.

Intern teacher.

Preparation and realization of courses and practical lessons in production theory.

2006. Joint venture MAZ-MAN, Minsk, Belarus.

Intern.

Supply management, production planning.

Education

2009-2012. École Nationale Supérieure des Mines de Saint-Étienne, France.

Ph.D. in Industrial Engineering.

Title of the thesis : Combinatorial problems in production lines configuration : computational analysis and optimization. Date of the defense : November 23, 2012.

	Membres of the jury :
Reviewers :	Farouk YALAOUI (Professor, The Troyes University of Technology) Christian ARTIGUES (Director of the research, LAAS-CNRS)
Examiners :	Abdelhakim ARTIBA (Professor, University of Valenciennes) Ammar OULAMARA (Professor, University of Lorraine) Frank WERNER (Professor, Otto-von-Guericke-University, Germany) François VANDERBECK (Professor, University of Bordeaux 1)
Thesis supervisor :	Alexandre DOLGUI (Professor, ENSM SE)
Thesis co-supervisor :	Xavier DELORME (Assistant Professor, ENSM SE)

5 articles published in international journals, participation in 7 conferences.

2007-2009. Molde University College, Molde, Norway.

Master of Science in Industrial Logistics

Title of the thesis : Multi-Product Batching and Scheduling with Buffered Rework : The Case of

a Car Paint Shop.

1 article published in an international journal.

2002-2007. Belarusian State University, Minsk, Belarus.

Specialist in Economic Theory, teacher of Economic Disciplines.

Title of the thesis : Asymmetrical Information Factor in the Analysis and Forecast of the Dynamics of the Car Market in Belarus.

HONORS AND FELLOWSHIP

Scholarships won :

2009. Nominal scholarship of the Ministry of Higher Education and Research, France.

2007. Scholarship of the Norwegian State Educational Loan Fund under the Quota Scheme for students from Central and Eastern Europe, Norway.

Fellowship :

2011-2012. Association Stéphanoise des Jeunes Chercheurs. Webmaster. Member of the board.

PUBLICATIONS IN REFERREED JOURNALS ON 10/10/2018

S. Kovalev, M.Y. Kovalyov, G. Mosheiov, E. Gerstl, Semi-V-shape property for two-machine no-wait proportionate flow shop problem with TADC criterion, *International Journal of Production Research*, 0(0) (2018) 1-7. **CNRS rank 2, FNEGE rank 2**.

A. Dolgui, **S. Kovalev**, M. Y. Kovalyov, S. Malyutin, A. Soukhal, Optimal workforce assignment to operations of a paced assembly line, *European Journal of Operational Research*, 264(1) (2018) 200-211. **CNRS rank 1, FNEGE rank 1**.

S. Kovalev, X. Delorme, A. Dolgui, A. Oulamara, Minimizing the number of stations and station activation costs for a production line, *Computers and Operations Research*, 79 (2017) 131-139. **CNRS rank 2**.

S. Kovalev, Maximizing total tardiness on a single machine in $O(n^2)$ time via a reduction to half-product minimization, *Annals of Operations Research*, 235(1) (2015) 815-819. **CNRS rank 2**.

O. Battaïa, X. Delorme, A. Dolgui, J. Hagemann, A. Horlemann, **S. Kovalev**, S. Malyutin, Workforce minimization for a mixed-model assembly line in the automotive industry, *International Journal of Production Economics*, 170(B) (2015) 489-500. **CNRS rank 1, FNEGE rank 1**.

A. Dolgui, **S. Kovalev**, E. Pesch, Approximate solution of a profit maximization constrained virtual business planning problem, *Omega*, 57(B) (2015) 212-216. **CNRS rank 2**.

F. Jaehn, **S. Kovalev**, M. Kovalyov, E. Pesch, Multi-Product Batching and Scheduling with Buffered Rework : The Case of a Car Paint Shop, *Naval Research Logistics Quarterly*, 61(6) (2014) 458-471. **CNRS rank 3**.

A. Dolgui, **S. Kovalev**, M. Kovalyov, J. Nossack, E. Pesch, Minimizing setup costs in a transfer line design problem with sequential operation processing, *International Journal of Production Economics*, 151 (2014) 186-194. **CNRS rank 1, FNEGE rank 1**.

A. Dolgui, **S. Kovalev**, Min-Max and Min-Max Regret Approaches to Minimum Cost Tools Selection, *4OR : A Quarterly Journal of Operations Research* 10(2) (2012) 181-192. **CNRS rank 3**.

P. Borisovsky, A. Dolgui, **S. Kovalev**, Algorithms and implementation of a set partitioning approach for modular machining line design, *Computers and Operations Research* 39(12) (2012) 3147-3155. **CNRS rank 2**.

A. Dolgui, **S. Kovalev**, Scenario Based Robust Line Balancing : Computational Complexity, *Dis-*

crete Applied Mathematics 160(13-14) (2012) 1955-1963.

S. Kovalev, X. Delorme, A. Dolgui, Line configuration to minimize setup costs, *Mathematical and Computer Modelling* 55(9-10) (2012) 2087-2095.

P. Borisovsky, A. Dolgui, **S. Kovalev**, Modeling transfer line design problem via a set partitioning problem, *Optimization Letters* 6(5) (2012) 915-926.

I. Gribkovskaia, **S. Kovalev**, F. Werner, Batching for work and rework processes on dedicated facilities to minimize the makespan, *Omega* 38(6) (2010) 522-527. **CNRS rank 2**.

CONFERENCE PROCEEDINGS

X. Delorme, Alexandre Dolgui, **S. Kovalev**, Mikhail Y. Kovalyov, An optimal workforce assignment problem for a paced assembly line at the line design stage, *29th European Conference on Operational Research (EURO 2018)*, Valencia, Spain, July 8-11, 2018.

S. Kovalev, R. Billot, A. Bousquet, An exact method for multi-objective multi-modal trip planning problem, *28th European Conference on Operational Research (EURO 2016)*, Poznan, Poland, July 3-6, 2016.

S. Kovalev, R. Billot, A. Bousquet, Time-expanded Linear Programming Models for Multi-objective Multimodal Trip Planning Problem, *27th European Conference on Operational Research (EURO 2015)*, Glasgow, UK, July 12-15, 2015.

S. Kovalev, R. Billot, A. Bousquet, Time-expanded mathematical programming models for multi-objective multi-modal trip planning problem, *Proceedings of the 4th International Symposium of Transport Simulation (ISTS)*, Ajaccio, France, June 1-4, 2014.

O. Battaïa, X. Delorme, A. Dolgui, J. Hagemann, A. Horlemann, **S. Kovalev**, S. Malyutin, Workforce Minimization for a Mixed-Model Assembly Line, *Preprints of the Eighteenth International Working Seminar on Production Economics*, R.W. Grubbström, H.H. Hinterhuber (Eds.), Innsbruck, February 24-28, 2014, Volume 3, p. 51-63.

A. Dolgui, **S. Kovalev**, M. Kovalyov, J. Nossack, E. Pesch, A Transfer Line Design Problem with Setup Times and Costs, *IFAC MIM '2013 Conference*, Saint Petersburg, July 19-21, 2013.

A. Dolgui, **S. Kovalev**, M. Kovalyov, J. Nossack, E. Pesch, Minimizing station activation costs in a line design problem, *EURO-INFORMS 2013*, Rome, July 1-4, 2013.

S. Kovalev, X. Delorme, A. Dolgui, A. Oulamara, Minimizing station activation costs in a multi-model transfer line with parallel operations at workstations, *26th Conference of the European Chapter on Combinatorial Optimization*, Paris, May 31 - June 1, 2013.

S. Kovalev, A. Dolgui, M. Kovalyov, J. Nossack, E. Pesch, Batch scheduling and transfer line design problems, *25th European Conference on Operational Research*, Vilnius, July 8-11, 2012.

S. Kovalev, X. Delorme, A. Dolgui, Minimisation du coût de mises en courses pour des lignes d'usinage multi-produits, *MOSIM 2012*, Bordeaux, June 6-8, 2012.

A. Dolgui, **S. Kovalev**, Minimisation du coût de sélection d'outils par les approches Min-Max et Min-Max Regret, *13ème Congrès Annuel de la ROADEF*, Angers, April 11-13, 2012.

X. Delorme, A. Dolgui, **S. Kovalev**, Minimizing Setup Cost for Multi-Part Production Lines, *Proceedings of the 41st International Conference on Computers & Industrial Engineering*, Los Angeles, October 23-25, 2011, p. 566-571.

P. Borisovsky, A. Dolgui, **S. Kovalev**, A New Model for Equipment Selection and Transfer Line Design Problem, *Preprints of the 18th IFAC World Congress*, S. Bittanti, A. Cenedese, S. Zampieri(Eds.), Milano, August 28 - September 2, 2011, p. 3962-3967.

P. Borisovsky, A. Dolgui, **S. Kovalev**, A minimum cost transfer line design problem : A set partitioning model and computer experiments, *12ème Congrès Annuel de la Société Française de*

Recherche Opérationnelle et d'Aide à la Dècision (ROADEF), Saint-Etienne, March 2-4, 2011, USB key, 2 pages.

A. Dolgui, **S. Kovalev**, Robust optimization approaches to minimum cost tools selection problems, *12ème Congrès Annuel de la Société Française de Recherche Opérationnelle et d'Aide à la Dècision (ROADEF)*, Saint-Etienne, March 2-4, 2011, USB key, 2 pages.

A. Dolgui, **S. Kovalev**, Reducing transfer balancing problem with known blocks and parallel activation mode to a set partitioning problem, *Tanaev's Readings, Proceedings of the 4th International Conference*, Y. Sotskov (Ed.), Minsk, March 28-29, 2010, p. 159-163.

Research reports

A. Dolgui, **S. Kovalev**, Scenario Based Robust Line Balancing, *Research Report LSTI-EMSE 2010-500-005*, November 2010, École des Mines de Saint-Étienne, 18 pages.

P. Borisovsky, A. Dolgui, **S. Kovalev**, Modeling and solving the transfer line design problem with parallel operations at workstations, *Research Report LSTI-EMSE 2010-500-003*, November 2010, École des Mines de Saint-Étienne, 19 pages.

A. Dolgui, **S. Kovalev**, Min-Max and Min-Max regret approaches to minimum cost tools selection, *Research Report LSTI-EMSE 2010-500-002*, July 2010, École des Mines de Saint-Étienne, 10 pages.

A. Dolgui, **S. Kovalev**, Transfer line design problem with parallel operations at workstations as a simple set partitioning problem, *Research Report LSTI-EMSE 2009-500-007*, December 2009, École des Mines de Saint-Étienne, 11 pages.