



Fatme MAKSSOUD

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PROFESSIONAL & ACADEMIC EXPERIENCE

- **Since Sep. 2025 Assistant Professor** — Beirut Arab University (BAU), Debbiyeh. Department of Industrial Engineering and Engineering Management.
- **Since Sep. 2017 Assistant Professor** — Lebanese University, Lebanon. Faculty of Engineering (Beirut & Tripoli): Petroleum, Mechanical and Civil Engineering departments; Faculty of Technology (Aabay): Industrial Engineering and Maintenance department.
- **Jun. 2023 – Jan. 2024 Lecturer** — ECE (Industrial and Computer Engineering school), Lyon, France.
- **Sep. 2021 – May 2023 Lecturer** — EPSI (Computer Engineering school), Lyon, France.
- **2016 – 2017 Lecturer** — Lebanese and French University, Lebanon.
- **Sep. 2014 – Aug. 2015 Lecturer, Computer Science** — Jean-Monnet University, Saint-Étienne, France.
- **Sep. 2013 – Aug. 2014 Lecturer, Industrial Engineering and Computer Science** — Lyon II University, France.
- **2011 – 2014 Research & Development Engineer** — PCI-SCEMM (Process Conception Engineering, French designer and manufacturer of machining systems).
- **2008 – 2010 Development Engineer** — Society SOPRA, mission at Sanofi Pasteur Group, Engineering SAP Skill Center, Lyon, France.

EDUCATION & QUALIFICATION

- **Jan. 2011 – May 2014 Ph.D., Industrial and Computer Engineering** — École des Mines de Saint-Étienne, School of Engineering, France.
- **2015 National Qualification, Assistant Professor** — Conseil National des Universités (CNU), France. Section 61 (Industrial Engineering, Automatic and Signal Processing) and Section 27 (Computer Science).
- **2006 – 2008 MSc, Computer Science** — Specialty "Information Systems", Claude Bernard Lyon University, France (Shanghai Ranking 2023: 201-300).
- **2003 – 2005 Bachelor, Computer Science** — Claude Bernard Lyon University, France.

RESEARCH INTERESTS

- Optimal Design of Production Lines
- Optimization (continuous and discrete) and Operations Research
- Supply Chain Management and Logistics
- Mathematical Programming Optimizers (CPLEX)

PUBLICATIONS

Referred Journal Papers

- F. Makssoud, O. Battaïa, A. Dolgui, K. Mpofu, O. Olabanji. "Re-balancing problem for assembly lines: new mathematical model and exact solution method". *Assembly Automation*, Vol. 35, Iss. 1, pp. 16-21, 2015.
- F. Makssoud, O. Battaïa, A. Dolgui. "An exact optimization approach for a Transfer Line Reconfiguration Problem". *International Journal of Advanced Manufacturing Technology*, 72, 717-727, 2014.
- O. Battaïa, E. Gurevsky, F. Makssoud, A. Dolgui. "Equipment location in machining transfer lines with multi-spindle heads". *Journal of Mathematical Modelling and Algorithms*, 12(2), 117-133, 2013.

Book Chapters

- F. Makssoud, O. Battaïa, A. Dolgui. "Multi-objective Approach and Model for Transfer Line Reconfigurations". *RMS Springer Book*, January 2020.

- F. Makssoud, O. Battaïa, A. Dolgui. "Reconfiguration of machining transfer lines". Studies in Computational Intelligence, vol. 472, 339-353, Springer, 2013.
- F. Makssoud, O. Battaïa, A. Dolgui. "An Exact Method for the Assembly Line Re-balancing Problem". IFIP Advances in Information and Communication Technology, vol. 414, 159-166, Springer, 2013.

Conference Papers & Proceedings

- P.-G. Ibrahim, A. Sekhari, S. Touchard, F. Makssoud, Y. Ouzrout, K. El Tawil. "A review of biomass value chain Assessment". SEIT 2023, Halifax, Canada.
- O. Battaïa, A. Dolgui, N. Guschinsky, F. Makssoud. "Mathematical model for processing multiple parts on multi-positional reconfigurable machines with turrets". APMS 2021, Nantes, France.
- F. Makssoud, O. Battaïa, A. Dolgui. "An exact method for the assembly line re-balancing problem". APMS 2013, State College, USA.
- F. Makssoud, O. Battaïa, A. Dolgui. "An exact approach to improve the reusability of serial machining lines". IESM 2013, Rabat, Morocco.
- F. Makssoud, O. Battaïa, A. Dolgui. "A new formulation for the assembly line re-balancing problem". ECCO'13, Paris, France.
- F. Makssoud, O. Battaïa, A. Dolgui. "An application of goal programming technique to reconfigurable transfer lines". ICINCO'12, Rome, Italy.
- F. Makssoud, O. Battaïa, A. Dolgui. "A mathematical model for a reconfiguration problem of transfer machining lines". INCOM'12, Bucharest, Romania.

Conference Abstracts

- F. Makssoud, O. Battaïa, A. Dolgui. "Reconfiguration des lignes d'usinage de transfert". ROADEF 2013, Troyes, France.
- F. Makssoud, O. Battaïa, A. Dolgui. "MIP model for reconfiguration of transfer lines". 17èmes journées STP du GdR MACS, Clermont-Ferrand, France, 2012.

TEACHING ACTIVITIES

Since Sep. 2025 — BAU, Debbiyeh (Industrial Engineering and Engineering Management Dept.):

- Production and Operations Management, Stochastic Operations Research, Failure Analysis, Organizational Design, Manufacturing Process, Introduction to Industrial Engineering, Production Engineering, Industrial Process Design.

Since Sep. 2017 — Lebanese University, Faculties of Engineering and Technology:

- Production Management, Quality Management, Supply Chain Management, Project Management (Industrial and Maintenance Engineering)
- Industrial Maintenance and Safety (Mechanical Engineering)
- Project Management, Risk Management, Primavera (Civil Engineering)
- Storage and Transportation of Oil and Gas (Petrochemical Department)

Jun. 2023 – May 2024 — ECE, Lyon:

- Graph Theory, Python, Management of Industrial Systems, Advanced Databases.

Sep. 2021 – May 2023 — EPSI, Lyon:

- NoSQL/MongoDB, UML, JavaScript, HTML, CSS, React, PHP, Symfony, Cybersecurity, WinDev, ERP (Codial, SAP, Sage 100).

Sep. 2020 – Jun. 2021 — Jinan University, Faculty of Sciences, Tripoli:

- ERP (SAP), E-Business, Entrepreneurship, Networking (Computer Science Dept.)

Oct. 2015 – Jun. 2016 — Lebanese-French University:

- Probabilities and Statistics, Operations Research.

Sep. 2014 – Aug. 2015 — Jean-Monnet University, Saint-Étienne:

- Information Systems / Databases, SQL Server (Master 1, Economic Engineering); Documentary and Computer Tools (Bachelor, Economics and Management).

Sep. 2013 – Aug. 2014 — Lyon II University:

- Decision Modeling of Systems (Master 2); Simulation and Manufacturing Systems / ARENA (Master 1); Supply Chain Management & TMS, Object-Oriented Programming (Java), Web Development (HTML, PHP) (Bachelor).

Jan. 2011 – Jun. 2013 — École Nationale Supérieure des Mines de Saint-Étienne (Monitor, Industrial Engineering):

- Engineering of Industrial Systems, Manufacturing Process Control, Design of Information Systems (SQL, MySQL Workbench), Web Programming (HTML, PHP).

SKILLS & TECHNIQUES

- Systems: SAP (ABAP), Java, C, C++, MATLAB, CAO, AutoCAD, Primavera, SolidWorks
- Mathematical Programming Optimizers: CPLEX, Xpress-MP, GAMS

- Databases: OLAP, SQL (Oracle, MySQL Workbench, SQL Server), PL/SQL, XML, XPath, XQuery
- Web: JavaScript, PHP, HTML, Web Services (WSDL, SOAP, UDDI)
- Operating Systems: Windows, UNIX, Macintosh
- Languages: English (proficient), French (fluent), Arabic (native)

ACADEMIC SERVICE & ACTIVITIES

- Reviewer for the International Journal of Production Research (IJPR).
- Reviewer for IFAC (Conference on Manufacturing Modeling, Management and Control).
- Participated in the organization of the 12th French Operations Research and Decision-Aid Society conference (ROADEF 2011), Saint-Étienne, France.
- PhD student representative, Administration Council, École Nationale Supérieure des Mines de Saint-Étienne.
- Member of ASEC (Stéphanoise Association of Young Researchers).