

# Lei LIU

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<b>RESEARCH DISCIPLINE</b>	Operations Management, Industrial Engineering, Stochastic Scheduling	
<b>ACADEMIC EXPERIENCE</b>	<b>Assistant Professor</b>	Sept., 2023-present
	<ul style="list-style-type: none"><li>• Management Science and Analytics</li><li>• Nottingham University Business School China (NUBS)</li><li>• University of Nottingham Ningbo China (UNNC)</li></ul>	
	<b>Marie Curie Research Fellow</b>	Feb., 2020-Jan., 2023
	<ul style="list-style-type: none"><li>• Horizon 2020 Framework Programme for Research and Innovation, European Union</li><li>• Industrial Collaborator: Ansaldo Energia S.p.A, Italy</li></ul>	
<b>EDUCATION</b>	<b>Ph.D. in Mechanical Engineering</b>	June, 2023
	<ul style="list-style-type: none"><li>• Industrial Engineering Sector</li><li>• Politecnico di Milano, Milano, Italy</li><li>• Advisor: Prof. Marcello Urgo</li><li>• Thesis: Risk-based scheduling in the re-manufacturing of turbine blades</li></ul>	
	<b>M.S. in Logistics Engineering</b>	July, 2017
	<ul style="list-style-type: none"><li>• Tsinghua University, Beijing, China</li><li>• Advisor: Prof. Canrong Zhang</li><li>• Thesis: A branch and bound algorithm for the robust parallel machine scheduling with sequence dependent set-up time</li></ul>	
<b>AWARDS</b>	<b>B.S. in Information Management and System</b>	July, 2013
	<ul style="list-style-type: none"><li>• Northeast Forestry University, Harbin, China</li></ul>	
	<b>Marie Curie Fellowship</b> , 2020-2023	
	Finalist, <b>PMS Best Student Paper Award</b> , 2022	
<b>PUBLICATIONS</b>	Finalist, <b>AITeM Young Researcher Award</b> , 2021	
	<b>Lei Liu</b> , Marcello Urgo. Robust scheduling in a two-machine re-entrant flow shop to minimise the value-at-risk of the makespan: a branch-and-bound and heuristic algorithms based on Markovian Activity Networks and phase-type distribution, <i>accepted at Annals of Operations Research</i>	
	<b>Lei Liu</b> , Marcello Urgo, 2023. Robust scheduling of a remanufacturing process for the repair of turbine blades, <i>CIRP Annals - Manufacturing Technology</i>	
	<b>Lei Liu</b> , Marcello Urgo, 2023. Risk-based robust production scheduling: a branch-and-bound approach for the stochastic two-machine flow shop scheduling problem to minimise the value-at-risk, <i>International Journal of Production Research</i>	
	<b>Lei Liu</b> , Marcello Urgo, 2022. A robust scheduling framework for re-manufacturing activities of turbine blades, <i>Applied Sciences</i> .	
	<b>Lei Liu</b> , Marcello Urgo, 2022. Scheduling remanufacturing activities for the repair of turbine blades: an approximate branch and bound approach to minimize a risk measure. In <i>Selected Topics in Manufacturing</i> . Springer, Cham.	

<b>CONFERENCE TALKS</b>	A branch and bound approach for stochastic 2-machine flow shop scheduling with rework	
	<ul style="list-style-type: none"> <li>• 18th International Workshop on Project Management and Scheduling(PMS), Ghent, Belgium</li> <li>• Finalist, Best Student Award</li> </ul>	2022
	Scheduling re-manufacturing activities for the repair of turbine blades: an approximate branch and bound approach to minimize a risk measure	
	<ul style="list-style-type: none"> <li>• XV AITeM Conference (Italian Association of Manufacturing Technology), Milano, Italy</li> <li>• Finalist, Young Researcher Award</li> </ul>	2022
	A branch-and-bound approach for the two-machine flow shop stochastic scheduling problem to minimize the value-at-risk	
	<ul style="list-style-type: none"> <li>• 31st European Conference on Operational Research(EURO), Athens, Greece</li> </ul>	2021
<b>TEACHING</b>	<b>Lecturer</b> , Introduction to Management Science for Business Decisions	
	<ul style="list-style-type: none"> <li>• 2023</li> <li>• Nottingham University Business School China</li> </ul>	
	<b>TA, Mentor</b> , Smart Manufacturing Lab	
	<ul style="list-style-type: none"> <li>• 2021, 2022, 2023</li> <li>• Politecnico di Milano</li> </ul>	
<b>OTHER PROFESSIONAL EXPERIENCES</b>	<b>Algorithm Engineer</b>	2018-2019
	<ul style="list-style-type: none"> <li>• ZheJiang Transportation Big Data Center, Hangzhou, China</li> </ul>	
	<b>Software Engineer</b>	2017-2018
	<ul style="list-style-type: none"> <li>• Hundsun Technologies Inc. Hangzhou, China</li> </ul>	
<b>MEMBERSHIPS</b>	<b>Member</b> , EURO Working Group on Project Management and Scheduling (PMS)	
<b>COMPUTER SKILLS</b>	<b>Languages:</b> C++, Python, Java, Latex	
	<b>Software and tools:</b> Gurobi, Pyomo, Plant simulation	

last updated: October 9, 2023