# He (River) HUANG

#### Personal Data

PHONE: +41 76 798 65 88 EMAIL: he.huang@vub.be

## **EXPERIENCE**

2023 - Now	Scientist, Paul Scherrer Institut, Villigen, Switzerland
2023 - Now	Researcher, Vrije Universiteit Brussel, Brussels, Belgium
2022 - 2023	Postdoctoral researcher, Vrije Universiteit Brussel, Brussels, Belgium
2021 - Now	Editor, EURO Working Group on MCDA (EWG-MCDA)
2021 - Now	Editor, International Society on Multiple Criteria Decision Making (MCDM)

#### **PUBLICATIONS**

- 1. He Huang and Sajid Siraj. Quantifying and reducing the complexity of multi-line charts as a visual aid in multi-criteria decision-making. *Annals of Operations Research*, pages 1–25, 2024
- 2. He Huang and Peter Burgherr. Mcda calculator: A streamlined decision support system for multi-criteria decision analysis. In *International Conference on Decision Support System Technology*, pages 31–45. Springer, 2024
- 3. He Huang. Robust stakeholder-based group-decision making framework: The multi-actor multi-criteria analysis (mamca) with the integration of best-worst method (bwm). In Jafar Rezaei, Matteo Brunelli, and Majid Mohammadi, editors, *Advances in Best-Worst Method*, pages 15–31, Cham, 2023. Springer Nature Switzerland
- 4. He Huang, Shiqi Sun, Lina Liu, Koen Mommens, and Cathy Macharis. Mamcabm: A data-driven stakeholder-based decision-support system that considers uncertainties. In Decision Support Systems XIII. Decision Support Systems in An Uncertain World: The Contribution of Digital Twins: 9th International Conference on Decision Support System Technology, ICDSST 2023, Albi, France, May 30–June 1, 2023, Proceedings, pages 80–96. Springer, 2023
- 5. He Huang, Rocsildes Canoy, Nicolas Brusselaers, and Geert Te Boveldt. Criteria preprocessing in multi-actor multi-criteria analysis. *Journal of Multi-Criteria Decision Analysis*, 2023
- 6. Nicolas Brusselaers, He Huang, Cathy Macharis, and K Mommens. A gps-based approach to measure the environmental impact of construction-related hgv traffic on city level. *Environmental Impact Assessment Review*, 98:106955, 2023
- 7. He Huang, Koen Mommens, Philippe Lebeau, and Cathy Macharis. The multi-actor multi-criteria analysis (mamca) for mass-participation decision making. In *Decision Support Systems XI: Decision Support Systems, Analytics and Technologies in Response to Global Crisis Management: 7th International Conference on Decision Support System Technology, ICDSST 2021, Loughborough, UK, May 26–28, 2021, Proceedings*, pages 3–17. Springer, 2021
- 8. He Huang, Yves De Smet, Cathy Macharis, and Nguyen Anh Vu Doan. Collaborative decision-making in sustainable mobility: identifying possible consensuses in the multi-

- actor multi-criteria analysis based on inverse mixed-integer linear optimization. International Journal of Sustainable Development & World Ecology, 28(1):64-74, 2021
- 9. He Huang, Philippe Lebeau, and Cathy Macharis. The multi-actor multi-criteria analysis (mamca): new software and new visualizations. In *Decision Support Systems X: Cognitive Decision Support Systems and Technologies: 6th International Conference on Decision Support System Technology, ICDSST 2020, Zaragoza, Spain, May 27–29, 2020, Proceedings 6,* pages 43–56. Springer, 2020
- 10. Sheida Hadavi, Heleen Buldeo Rai, Sara Verlinde, He Huang, Cathy Macharis, and Tias Guns. Analyzing passenger and freight vehicle movements from automatic-number plate recognition camera data. *European Transport Research Review*, 12(1):1–17, 2020

## SOFTWARE DEVELOPMENT

2023 -2024	Webapp Development at Paul Scherrer Institut
	Design and develop the MCDA Calculator
2018 -2020	Webapp Development at Vrije Universiteit Brussel
	Design and develop the new MAMCA software

# **EDUCATION**

LUCATION		
2018 -2022	PhD in Human Science, <b>Vrije Universiteit Brussel</b> , Brussels, Belgium Major: Applied Economics Title of the PhD research: "Stakeholder involvement: a Participatory tool"	
2017 -2018	Master of Science in Electronics and ICT, <b>KU LEUVEN</b> , Leuven, Belgium Major: Internet Computing	
2015 -2017	Bachelor of Science in Engineering, KU LEUVEN, Leuven, Belgium Major: Electronics Engineering	
2013 -2017	Bachelor of Science in <b>Southwest of Jiaotong University</b> , Sichuan, China Major: Vehicle Engineering	