

# River HUANG

## PERSONAL DATA

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## EXPERIENCE

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- 2023 - Now    Scientist, **Paul Scherrer Institut**, Villigen, Switzerland
- 2023 - Now    Researcher, **Vrije Universiteit Brussel**, Brussels, Belgium
- 2024, Sep.    Visiting researcher, **University of Catania**, Catania, Italy
- 2023, Apr.    Visiting researcher, **University of Duisburg-Essen**, Duisburg, Germany
- 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

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1. H. Huang, S. Heuninckx, C. Macharis, 20 years review of the multi actor multi criteria analysis (mamca) framework: a proposition of a systematic guideline, *Annals of Operations Research* (2024) 1-36 [doi:10.1007/s10479-024-06357-y](https://doi.org/10.1007/s10479-024-06357-y)
2. H. Huang, X. Zhang, S. Corrente, S. Siraj, M. Kiba-Janiak, Facilitating Sustainable Logistics Policy Development Using Multicriteria Satisfaction Analysis: A Case of Preference Mapping for Cargo Bike Last-Mile Delivery, *Springer Nature Switzerland, Cham*, 2024, pp. 129-144. [doi:10.1007/978-3-031-67936-0\\_10](https://doi.org/10.1007/978-3-031-67936-0_10)
3. H. Huang, S. Sun, K. Mommens, C. Macharis, The mamcabm framework for the evaluation of mobility decision-making problems: theory and practice, *International Transactions in Operational Research* (2024). [doi:10.1111/itor.13544](https://doi.org/10.1111/itor.13544)
4. H. Huang, P. Burgherr, C. Macharis, A collaborative group decision-support system: the survey based multi-actor multi-criteria analysis (mamca) software, *Journal of the Operational Research Society* (2024) 1-22 [doi:10.1080/01605682.2024.2398114](https://doi.org/10.1080/01605682.2024.2398114)
5. H. Huang, S. Siraj, Quantifying and reducing the complexity of multi-line charts as a visual aid in multi-criteria decision-making, *Annals of Operations Research* (2024) 1-25 [doi:10.1007/s10479-024-06090-6](https://doi.org/10.1007/s10479-024-06090-6)
6. H. Huang, P. Burgherr, Mcda calculator: A streamlined decision support system for multi-criteria decision analysis, in: *International Conference on Decision Support System Technology*, Springer, 2024, pp. 31-45. [doi:10.1007/978-3-031-59376-5\\_3](https://doi.org/10.1007/978-3-031-59376-5_3)
7. H. Huang, Robust stakeholder-based group-decision making framework: The multi-actor multi-criteria analysis (mamca) with the integration of best-worst method (bwm), in: J. Rezaei, M. Brunelli, M. Mohammadi (Eds.), *Advances in Best-Worst Method*, Springer Nature Switzerland, Cham, 2023, pp. 15-31. [doi:10.1007/978-3-031-40328-6\\_2](https://doi.org/10.1007/978-3-031-40328-6_2)
8. H. Huang, S. Sun, L. Liu, K. Mommens, C. 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, ICDSS*

- 2023, Albi, France, May 30–June 1, 2023, Proceedings, Springer, 2023, pp. 80–96. [doi:10.1007/978-3-031-32534-2\\_7](https://doi.org/10.1007/978-3-031-32534-2_7)
9. H. Huang, R. Canoy, N. Brusselaers, G. Te Boveldt, Criteria preprocessing in multi-actor multi-criteria analysis, *Journal of Multi-Criteria Decision Analysis* (2023). [doi:10.1002/mcda.1804](https://doi.org/10.1002/mcda.1804)
  10. N. Brusselaers, H. Huang, C. Macharis, K. Mommens, A gps-based approach to measure the environmental impact of construction-related hgv traffic on city level, *Environmental Impact Assessment Review* 98 (2023) 106955. [doi:10.1016/j.eiar.2022.106955](https://doi.org/10.1016/j.eiar.2022.106955)
  11. H. Huang, K. Mommens, P. Lebeau, C. 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*, Springer, 2021, pp. 3–17. [doi:10.1007/978-3-030-73976-8\\_1](https://doi.org/10.1007/978-3-030-73976-8_1)
  12. H. Huang, Y. De Smet, C. Macharis, N. A. V. 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) (2021) 64–74. [doi:doi.org/10.1080/13504509.2020.1795005](https://doi.org/10.1080/13504509.2020.1795005)
  13. H. Huang, P. Lebeau, C. 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, Springer, 2020, pp. 43–56. [doi:10.1007/978-3-030-46224-6\\_4](https://doi.org/10.1007/978-3-030-46224-6_4)
  14. S. Hadavi, H. B. Rai, S. Verlinde, H. Huang, C. Macharis, T. Guns, Analyzing passenger and freight vehicle movements from automatic-number plate recognition camera data, *European Transport Research Review* 12 (1) (2020) 1–17. [doi:10.1186/s12544-020-00405-x](https://doi.org/10.1186/s12544-020-00405-x)

## SOFTWARE DEVELOPMENT

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| 2023 -2024 | Webapp Development at PAUL SCHERRER INSTITUT<br>Design and develop the <b>MCDA Calculator</b>        |
| 2018 -2020 | Webapp Development at VRIJE UNIVERSITEIT BRUSSEL<br>Design and develop the new <b>MAMCA software</b> |

## EDUCATION

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| 2018 -2022 | PhD in HUMAN SCIENCE, <b>Vrije Universiteit Brussel</b> , Brussels, Belgium<br>Major: Applied Economics<br>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<br>Major: Internet Computing   |
| 2015 -2017 | Bachelor of Science in ENGINEERING, <b>KU LEUVEN</b> , Leuven, Belgium<br>Major: Electronics Engineering  |
| 2013 -2017 | Bachelor of Science in <b>Southwest of Jiaotong University</b> , Sichuan, China<br>Major: Vehicle Engineering   |