

Jarne THYS

✉ contact@jarnethys.com

🆔 0009-0005-9348-7405

🌐 jarne-thys

🎓 Google Scholar

🌐 https://jarnethys.com



Research Profile

Ph.D. researcher focusing on human-centered AI for education. My research combines the technical development of human-in-the-loop AI systems for educational decision support with responsible AI governance, focusing on human agency, transparency, and meaningful human-AI collaboration.

Research interests: Human-Centered AI · AI in Education · Personalized Learning · AI Governance

Employment History

- 2024 – Present 📌 **Ph.D. Student** Digital Future Lab, Hasselt University.
- 2024 📌 **Researcher** Digital Future Lab, Hasselt University.

Education

- 2024 – Present 📌 **Ph.D., Hasselt University** in Human-Centered AI for Education
- 2022 – 2024 📌 **M.Sc. Engineering Technology, Hasselt University - KU Leuven** in Software Systems Engineering.
- 2019 – 2023 📌 **B.Sc. Engineering Technology, Hasselt University - KU Leuven** in Software Systems Engineering.

Grants & Awards

- 2026 📌 **Poster Prize**, UHasselt Research Day 2026, for “*INSIGHT: Bridging the Student-Teacher Gap in Times of Large Language Models*”.
- 2025 📌 **Travel Grant**, Research Foundation Flanders (FWO), to attend the 19th EATEL Summer School.

Research Projects

- 2026 – 2027 📌 **MathBridge: adaptive math support for starting engineering technology students**, Hasselt University. Initiated and led the writing of the proposal, and contributed to its subsequent planning and development (PI: Davy Vanacken).
- 2024 – 2026 📌 **AI-supported inclusive education and personalised learning at UHasselt**, Hasselt University. Provided input on the project proposal and participated in early discussions on the project development (PI: Gustavo Rovelo Ruiz).

Research Publications

Conference Proceedings

- 1 **J. Thys**, Y. Dirckx, D. Vanacken, and G. Rovelo Ruiz, “Scaffolding the Scaffold: Co-Evolving Human-Centered Boundaries for GenAI in Education,” in *Frontiers in Artificial Intelligence and Applications*, M. Alimardani, T. Lenaerts, A. Meyer-Vitali, A. Nowé, J. Vennekens, and S. Wang, Eds., IOS Press, Jul. 2026, ISBN: 978-1-64368-670-7. 🔗 DOI: 10.3233/FAIA260504
- 2 **J. Thys**, D. Vanacken, and G. Rovelo Ruiz, “Engineering Trustworthy Automation: Design Principles and Evaluation for AutoML Tools for Novices,” en, in *Engineering Interactive Computer Systems. EICS 2025 International Workshops*, C. Fayollas et al., Eds., Series Title: Lecture Notes in Computer Science, vol. 16511, Cham: Springer Nature Switzerland, 2026, pp. 105–122, ISBN: 978-3-032-26050-5. 🔗 DOI: 10.1007/978-3-032-26051-2_9

- 3 S. Vanbrabant, **J. Thys**, G. Eerlings, K. Luyten, G. Rovelo Ruiz, and D. Vanacken, "From Embeddings to Exploration: Engineering Interactive Latent Space Visualizations for AI Model Sensemaking," en, in *Proceedings of the ACM on Human-Computer Interaction*, vol. 10, Jun. 2026, pp. 1–31. [DOI](#): 10.1145/3816764
- 4 L. Douce, **J. Thys**, S. Van De Sanden, K. Willems, D. Vanacken, and G. Rovelo Ruiz, "The Effect of VR and Haptic Feedback Devices on Online Consumer Decision-Making," en, in *Book of abstracts - 31st Recent Advances in Retailing & Consumer Science Conference*, 2025. [URL](#): <https://documentserver.uhasselt.be//handle/1942/48289>

Other

- 1 **J. Thys**, M. Gutierrez Lopez, E. Geurts, D. Vanacken, and G. Rovelo Ruiz, *Negotiating AI Boundaries Through Participatory Futuring*, en, CHI '26 Workshop on Mapping the Responsible Democratization of Generative AI through Participatory Futuring, 2026. [URL](#): <https://documentserver.uhasselt.be//handle/1942/49578>
- 2 **J. Thys**, D. Vanacken, and G. Rovelo Ruiz, *Improving AI Text Classification: A Cascaded Approach*, en, Workshop on Engineering Interactive Systems Embedding AI Technologies, 2025. [URL](#): <http://hdl.handle.net/1942/46328>
- 3 **J. Thys**, S. Vanbrabant, D. Vanacken, and G. Rovelo Ruiz, *INSIGHT: Bridging the Student-Teacher Gap in Times of Large Language Models*, en, Proceedings of the D-SAIL Workshop - Transformative Curriculum Design: Digitalisation, Sustainability, and AI Literacy for 21st Century Learning, Palermo, Italy, Jul. 2025. [URL](#): <https://ceur-ws.org/Vol-4051/paper4.pdf>
- 4 **J. Thys**, *Ontwikkeling van een AI-gebaseerd prototype dat studenten en docenten ondersteunt met oefeningen*, Dutch, Master thesis, 2024. [URL](#): <http://hdl.handle.net/1942/43873>

Talks & Presentations

- | | |
|------|---|
| 2026 | <ul style="list-style-type: none"> ■ <i>Paper presentation</i>: "Dual-Modal Haptic Interaction in VR to Support Window Purchasing Decisions". 23rd EuroXR International Conference, Valencia, Spain. ■ <i>Paper presentation</i>: "Scaffolding the Scaffold: Co-Evolving Human-Centered Boundaries for GenAI in Education". 5th International Conference on Hybrid Human-Artificial Intelligence, Brussels, Belgium. ■ <i>Paper presentation</i>: "Negotiating AI Boundaries Through Participatory Futuring". CHI '26 Workshop on Mapping the Responsible Democratization of Generative AI through Participatory Futuring, Barcelona, Spain. ■ <i>Poster</i>: "INSIGHT: Bridging the Student-Teacher Gap in Times of Large Language Models". UHasselt Research Day 2026, Diepenbeek, Belgium. (Poster Prize) |
| 2025 | <ul style="list-style-type: none"> ■ <i>Paper presentation</i>: "INSIGHT: Bridging the Student-Teacher Gap in Times of Large Language Models". D-SAIL Workshop – Transformative Curriculum Design: Digitalisation, Sustainability, and AI Literacy for 21st Century Learning, Palermo, Italy. ■ <i>Paper presentation</i>: "Improving AI Text Classification: A Cascaded Approach". 3rd Workshop on Engineering Interactive Systems Embedding AI Technologies, Trier, Germany. ■ <i>Poster</i>: "INSIGHT: Bridging the Student-Teacher Gap in Times of Large Language Models". 19th EATEL Summer School on Technology Enhanced Learning, Rethymno, Greece. ■ <i>Poster</i>: "The Effect of Sensory Technologies on Consumer Behavior through Haptic Imagery in a Digital Context". UHasselt Research Day 2025, Diepenbeek, Belgium. |
| 2024 | <ul style="list-style-type: none"> ■ <i>Talk</i>: "Teaching with AI: Research on Responsible and Human-Centered Applications". Hasselt University, Diepenbeek, Belgium. |

Teaching

Teaching Assistant

- 2026 – 2027  **Teaching Assistant**, Hasselt University. Courses: Introduction to AI and machine learning, Machine Learning (incl. Deep Learning), Information Visualisation.
- 2025 – 2026  **Teaching Assistant**, Hasselt University. Courses: Introduction to AI and machine learning, Machine Learning (incl. Deep Learning), Information Visualisation.
- 2024 – 2025  **Teaching Assistant**, Hasselt University. Courses: Machine Learning (incl. Deep Learning).

Thesis Supervision

- 2026 – 2027  Master's thesis, Mitch van de Broek: *AI-driven sustainable fashion consumption*.
- 2025 – 2026  Master's thesis, Thibo De Belie: *AI-driven personalization for context-aware interventions in digital learning*.
-  Master's thesis, Thibaut Swerts: *Annotation-Free Unsupervised Gait Deviation Profiling via Markerless Multi-Camera 3D Reconstruction: An Interpretable Framework Toward Fall Risk Stratification and Clinical Monitoring*.
-  Bachelor's thesis, Arne Kunnen: *An AR learning environment for electronic systems with LLM-based real-time feedback*.
-  Bachelor's thesis, Toon Mertens: *Engine-grounded LLM feedback for in-game chess learning*.
-  Bachelor's thesis, Siebe Jonker: *Transparent multimodal fabric weave detection: Fusing CNN, OCR, and tactile input with XAI*.
-  Individual project, Vincent Coucke: *Efficient annotation of multimodal assembly processes via synchronized visualization and zero-shot segmentation*.
- 2024 – 2025  Master's thesis, Seppe Vandenberk: *Data management plan completion and reviewing through human-in-the-loop AI*.
-  Master's thesis, Lise Verbeeck: *ModuARboard: Exploring AR Dashboards for Immersive Analytics*.
-  Bachelor's thesis, Ruben Swidzinski: *Intelligible AI Grading Support for Educators*.
-  Bachelor's thesis, Thibo De Belie: *Feedback-Loops in Education: A Mixture of Agents Platform with Bidirectional Input and Dashboard Analytics*.
- 2023 – 2024  Bachelor's thesis, Lukas Mertens: *Weight perception methods in VR*.

Academic Service

Reviewing

- 2026  **Reviewer**, 27th International Conference on Artificial Intelligence in Education (AIED 2026).
-  **Reviewer**, 18th ACM SIGCHI Symposium on Engineering Interactive Computing Systems (EICS 2026).
-  **Reviewer**, 8th Annual Symposium on HCI Education (EduCHI 2026).
- 2025  **Reviewer**, 26th International Conference on Artificial Intelligence in Education (AIED 2025).

International Experience

- 2025  **19th EATEL Summer School on Technology Enhanced Learning**, Rethymno, Greece.

References

Available on request