

Summary

PhD researcher in robotics with a background in mechanical and electrical engineering, specializing in trajectory analysis, motion recognition, and skill generalization for robots. Experienced in academic research, software development, and interdisciplinary collaboration.

Experience

- 2020–Present **PhD Researcher — Robotics Research Group, Department of Mechanical Engineering, KU Leuven University**, Leuven, Belgium
- Conducting original research on invariant descriptors for rigid-body motion as part of a European Research Council (ERC) Advanced Grant ROBOTGENSKILL project, focused on generalizing human-demonstrated robot skills. This research contributed to advancements in robotics, pattern recognition, and biomechanics.
 - Worked on a Flemish research project focused on trajectory generation for robotic spray painting in industrial applications.
 - (Co-)mentored three master thesis students, providing guidance on experimental design, data analysis, and academic writing.
 - (Co-)authored five peer-reviewed papers in international journals and conferences.
 - Presented research findings at the 2023 ICRA and 2024 CASE international conferences.
 - Collaborated with interdisciplinary teams and external research partners.
 - Received a token of appreciation for serving as a session chair at the 2024 CASE Conference.
 - Awarded the Best Poster Award at the 2023 Flanders Make Scientific conference on machines, vehicles, and production technology.
 - Assisted in teaching undergraduate courses and grading assignments.

Education

- 2020–2025 **PhD Student, KU Leuven University**, Leuven, Belgium.
- PhD thesis: Invariant Trajectory Similarity Measurement: resolving singularity issues for robust invariant rigid-body motion recognition.
 - Elective courses:
 - Course on Artificial Intelligence (2022) at KU Leuven
 - Summer school on Screw-Theory-based Methods in Robotics (2023) at TU Delft in the Netherlands
- 2018–2020 **Master of Science in Mechanical Engineering - specialization in Mechatronics and Robotics, KU Leuven University**, Leuven, Belgium.
- Graduated cum laude.
- 2014–2018 **Bachelor of Science in Electrical Engineering - with a minor in Mechanical Engineering, KU Leuven University**, Leuven, Belgium.
- Graduated cum laude.

Languages

Dutch	Native	Mother tongue
English	Fluent	Used in academic and professional settings
French	Conversational	Can understand and communicate in routine situations.

Programming Languages

MATLAB	Proficient	Extensive experience in numerical computing and algorithm development
Python	Intermediate	Comfortable with scripting, data processing, and basic libraries
C++	Beginner	Familiar with syntax and fundamental programming concepts

Skills

Software MATLAB, Python, LaTeX, ROS, Git, Linux, C++
Hardware Franka Emika Panda robot, HTC Vive

Projects

Website Personal website built using HTML, JavaScript, and CSS; deployed via GitHub Pages.

References

Available upon request.