

Summary

Postdoctoral 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

2025–Present **Postdoctoral Researcher — Robotics Research Group, Department of Mechanical Engineering, KU Leuven University**, Leuven, Belgium  
Research highlights:  
○ Continuing original research on invariant descriptors for rigid-body motion.

Education

2020–2025 **PhD Student, KU Leuven University**, Leuven, Belgium.  
○ Thesis title: *Invariant Trajectory Similarity Measurement: resolving singularity issues for robust invariant rigid-body motion recognition.*  
○ PhD research highlights:  
- Conducted 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 second 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 two peer-reviewed international journal papers and three peer-reviewed international conference papers.  
- Presented research findings at the 2023 CASE, 2024 ICRA, and 2025 CASE international conferences.  
- Received a token of appreciation for serving as a session chair at the 2023 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.  
○ Elective courses followed:  
- 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  
C++ Beginner

*Comfortable with scripting, data processing, and basic libraries*  
*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.