



Leids Universitair
Medisch Centrum

Master Thesis Project Cardiothoracic Surgery

The Role of Virtual Reality in Education of
Healthcare Staff and Pain Management in
Surgical Patients

*Within the Leiden Amsterdam artificial Intelligence and
eXtended Realities (LAIXR) group research is performed to
applications of Virtual Reality and Artificial Intelligence in the
Cardiothoracic Surgery*

Interested? Send a mail to l.n.a.coopmans@lumc.nl or
e.a.f.mahtab@lumc.nl



LAIXR

LEIDEN AMSTERDAM AI XR GROUP

Step into the world where cutting-edge technology meets healthcare innovation. At LAIXR, a research group within the cardiothoracic surgery department in the Leiden University Medical Center (LUMC), we develop Virtual Reality (VR) simulators powered by Artificial Intelligence (AI) to transform medical training and improve patient care.

Our VR tools help medical professionals master complex skills and provide patients with better experiences by reducing stress, explaining their treatment journeys, or managing pain through distraction. While we excel in technology development, there's still work to be done in refining user-friendly designs to maximize their impact.

As a graduation student with LAIXR, you'll have the chance to:

- Work on innovative projects combining VR, AI, and healthcare.
- Gain firsthand hospital experience, from shadowing surgeries to observing patient care.
- Solve real-world challenges and create impactful solutions.

Join us to help bridge the gap between advanced technology and its users, shaping the future of healthcare today.

Interested? Send a mail to l.n.a.coopmans@lumc.nl or e.a.f.mahtab@lumc.nl

