

SKELETON ANNOTATION FOR ADVANCED MOVEMENT ANALYSIS

■ CLIENT'S PROFILE

Country: Germany

Size: 2,000+ employees

Industry focus: Software and hardware development for digital surgery and radiation therapy.

■ PROJECT GOAL

Development of **an AI model** that **automatically detects interactions between medical staff** during surgical interventions.

■ PROJECT DESCRIPTION

medDARE successfully **collected video data from operating rooms**, capturing 25 surgical procedures, each lasting one hour. To ensure compliance with privacy regulations, **the videos underwent anonymization**, including blurring of faces, screens, tattoos, birthmarks, and any other identifiable elements.

Following this, our team conducted detailed **skeleton annotation** of the videos, enabling precise analysis of people's movements and interactions. This structured approach ensured high-quality, privacy-compliant data for advanced AI model training.

Through a combination of cutting-edge technology and stringent compliance measures, medDARE provided the client with a **comprehensive dataset optimized for AI training**. This project underscores our expertise in handling sensitive medical data while ensuring compliance with international data protection standards.

PROJECT WORKFLOW & TEAM ASSIGNED



- medDARE managed both **the technical and legal aspects of the video recording**, ensuring alignment with the client's technical requirements and adherence to GDPR compliance. This phase was overseen by a project manager and an IT support manager, guaranteeing a seamless recording process at hospital premises.
- The second phase, **video anonymization**, was carried out using medDARE's internally developed software, ensuring high-speed processing with uncompromised data security. A team of 20+ non-medical data annotators, under the supervision of a dedicated project manager, performed quality control to maintain accuracy.
- Finally, the **video annotation** phase was executed in CVAT by another team of 10+ non-medical data annotators. By following the client's specific annotation guidelines, medDARE ensured accuracy and consistency, laying the groundwork for the development of a robust AI model.

PROJECT'S OUTCOME

The project was **successfully delivered** on time and within the approved budget, fully meeting the client's expectations. The annotated video data played a crucial role in the development of an AI model designed to automatically detect interactions between medical staff during surgical interventions. This advancement supports **improved workflow analysis and optimization in operating rooms**, contributing to the broader development of AI-driven solutions in surgical environments.

The client has since expressed interest in expanding the project scope to include additional surgical scenarios, reinforcing the long-term value of our partnership. This success story highlights medDARE's commitment to leveraging AI for meaningful healthcare advancements, proving our position as a leader in AI-powered medical solutions.



CONTACT US TO LEARN MORE ABOUT MEDDARE & HOW IT CAN TRANSFORM YOUR AI PROJECT

E-mail: contact@meddare.ai
Website: www.meddare.ai