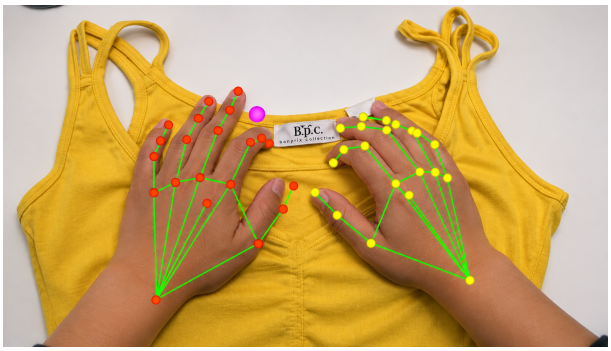
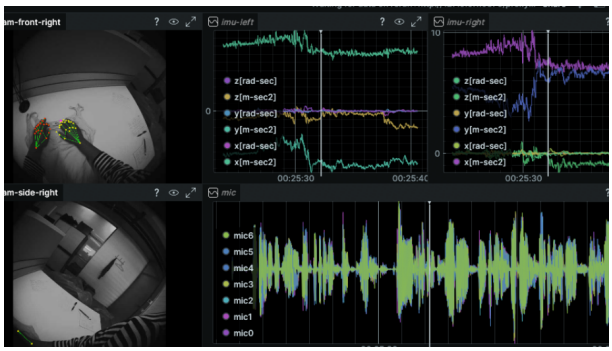
Team Possegger
Institute of Visual Computing
Graz University of Technology

Human Visual Attention Analysis During Garment Inspection Using Smart Glasses

Bachelor Thesis





Objective:

Automated garment inspection is a challenging task due to the wide variety of clothing types, fabric textures, and possible defects. Human inspectors naturally adapt their visual attention to identify relevant areas and potential defects. Understanding these inspection strategies can provide valuable insights for developing intelligent robotic inspection systems. This project investigates human visual attention during garment inspection using smart glasses equipped with eye-tracking technology. The resulting insights can support the development of robotic systems that learn from human inspection behavior, enabling more efficient and adaptive automated garment inspection.

Qualifications:

- Proficiency in Python
- Successful completion of CV course
- Familiarity with heterogeneous data processing
- Experience with data analysis and visualization

Press coverage:

- **Kleine Zeitung**: "Saubermacher arbeitet an KI-gestütztem Sortiersystem für Alttextilien" (*10.09.2025*)
- **Kronen Zeitung**: "KI soll Müllberge an Altkleidern schrumpfen lassen" (*10.09.2025*)

Contact:

Nadezda Kirillova
nadezda.kirillova@tugraz.at

Horst Possegger
possegger@tugraz.at