

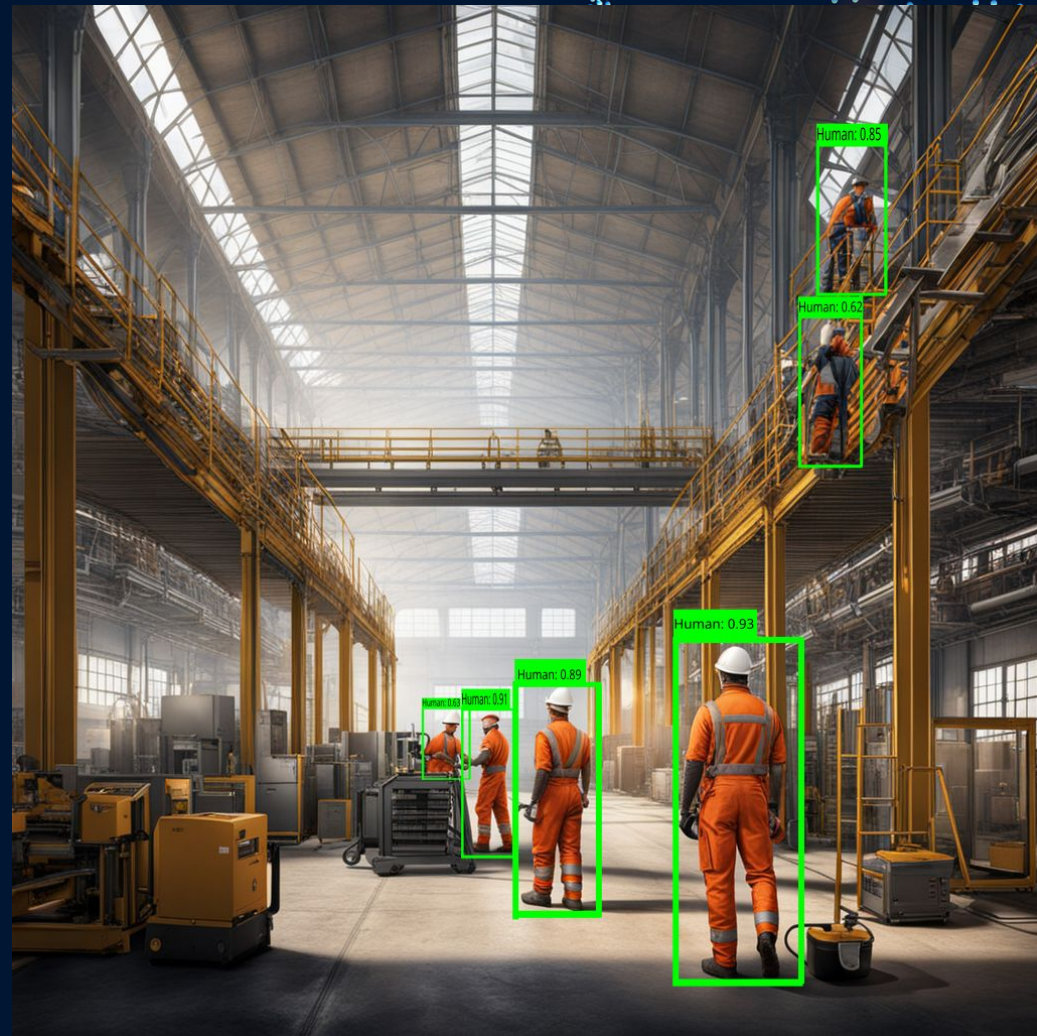
# IV Visualizer

**Team:** Josua Benjamin Eyl, Lukas Friedrich, Robin Köchel, Nathaniel Till  
Hartmann, Max Bretschneider

**Betreuer:** Mickael Cormier M.Sc., Stefan Wolf M.Sc.

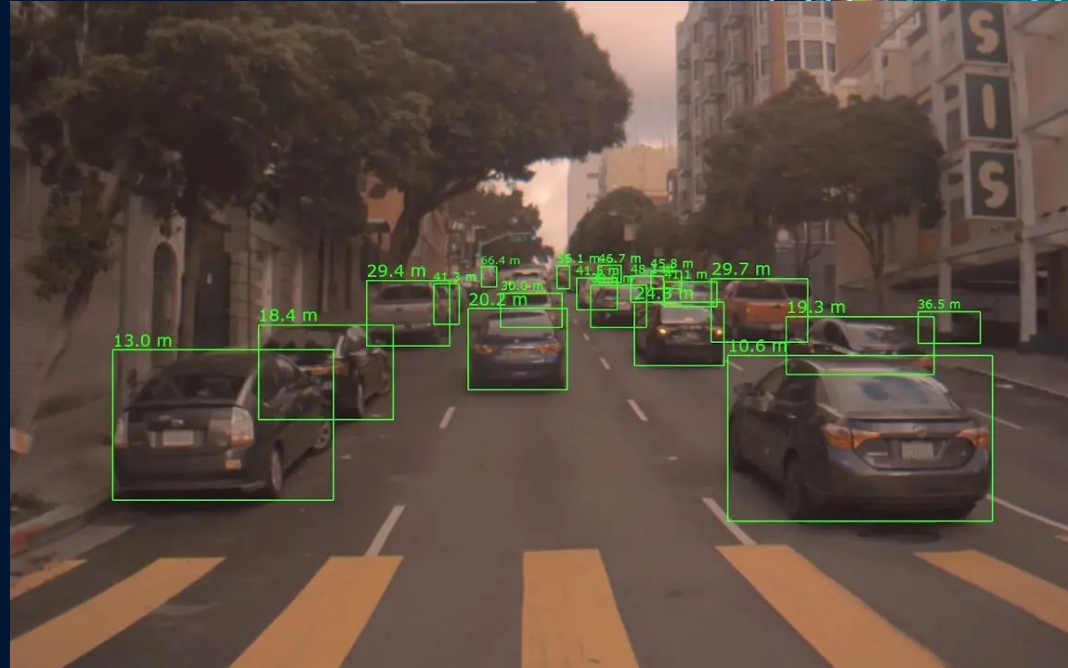
# Zielsetzung

- Anzeigen von Video Streams und deren KI-Daten
- Speichern der Videodaten
- bis zu 10 Stream anzeigen



# Zielsetzung

- Konfigurierbarkeit
- Erweiterbarkeit
- Skalierbarkeit
- Intuitive Anwendung





# Anforderungen

## Grundfunktionen

- Stream bis zu 72h speichern
- Skelette und Boxen im Stream anzeigen
- Liniendiagramm aus KI Daten
- Video exportieren
- Stream maskieren
- Log Dateien anzeigen
- Speicherung in Projekten

## Optionale Funktionen

- Skelette und Boxen farbig darstellen
- Kuchendiagramme aus KI Daten
- GUI mit Passwort schützen

# Produktumgebung

**Betriebssystem:** Ubuntu

**Programmiersprache:** C++

**Frameworks:** QT

**Containerverwaltung:** Docker,  
Kubernetes

**Datenbank:** SQL und NoSQL Datenbank



GitLab



# Projektauswahl

Choose project

Project 1 ▼

New project

Load

Delete

# MainWindow

MainWindow

Window File Settings

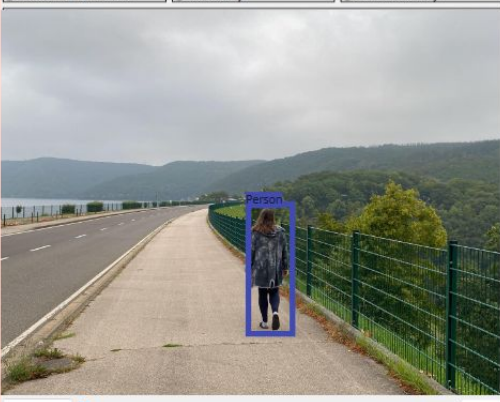
Cluster X

- Cluster 1
  - person detection
  - ▼ cams
    - cam 1
    - cam 2
    - cam 3
    - new cam
  - fall detection
  - > person counting

Cam 1 X

Export Config Set Mask

☐ Video with annotation ☐ Video only ☐ Annotation only

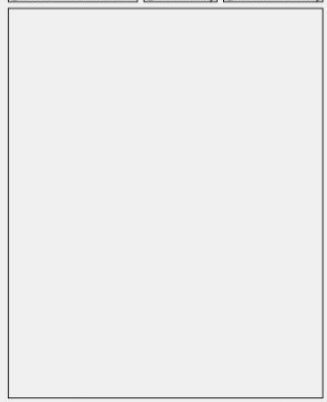


Play 0.25

Cam 2 X

Export Config Set Mask

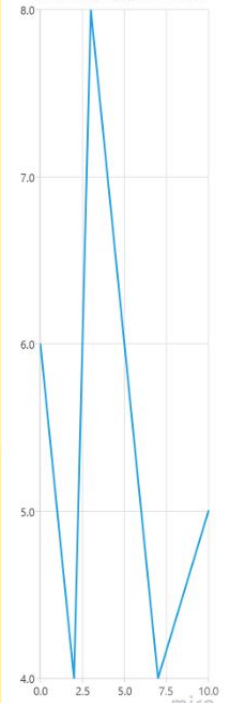
☐ Video with annotation ☐ Video only ☐ Annotation only



Play 0.25

Diagram X

Einfaches Liniendiagramm Beispiel



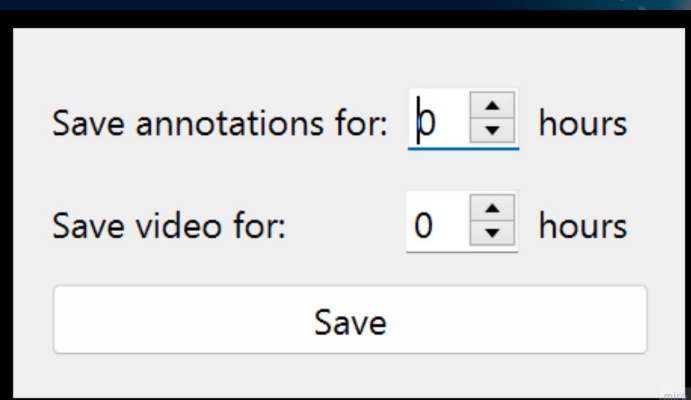
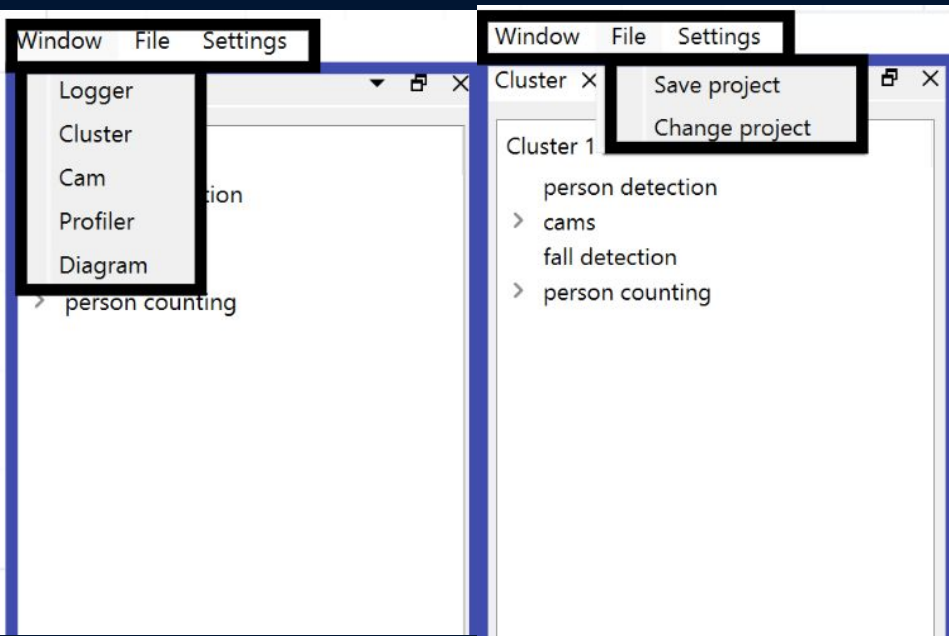
Logger X

All

Profiler X

| Entry              | Values (ms) | Change (ms) |
|--------------------|-------------|-------------|
| 1 Optical Detec... | 10.0        | 0.4         |
| 2 InputReadFrame   | 0.0         | 1.4         |
| 3 Preprocess       | 5.0         | 0.4         |
| 4 Postprocess: ... | 8.0         | 0.8         |

# Toolbar





# Video

Window File Settings

Cluster X


Cluster 1

- person detection
- ▼ cams
  - cam 1
  - cam 2
  - cam 3
  - new cam
- fall detection
- > person counting

Cam 1 X

Export Config Set Mask

☒ Video with annotation ☐ Video only ☐ Annotation only

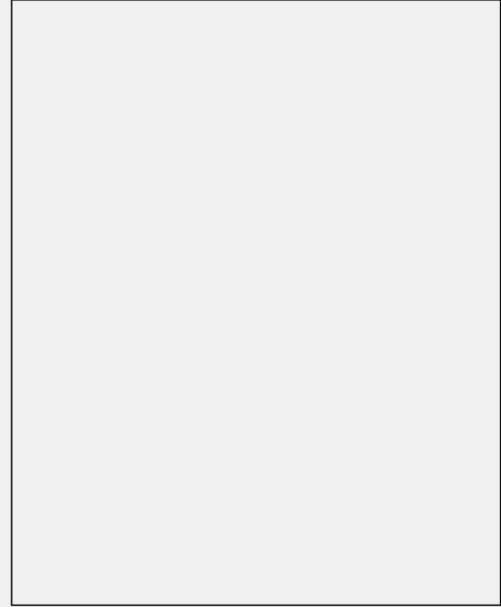


Play 0.25

Cam 2 X

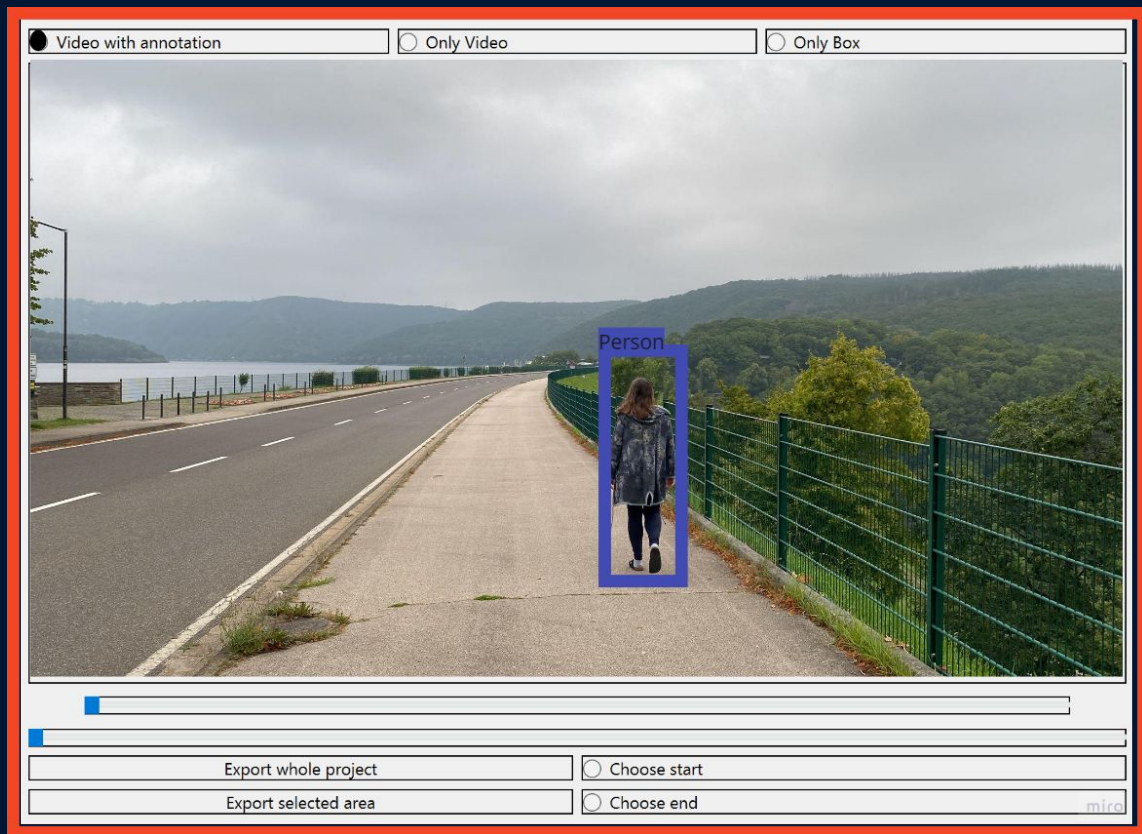
Export Config Set Mask

☐ Video with annotation ☐ Video only ☐ Annotation only



Play 0.25

# Export



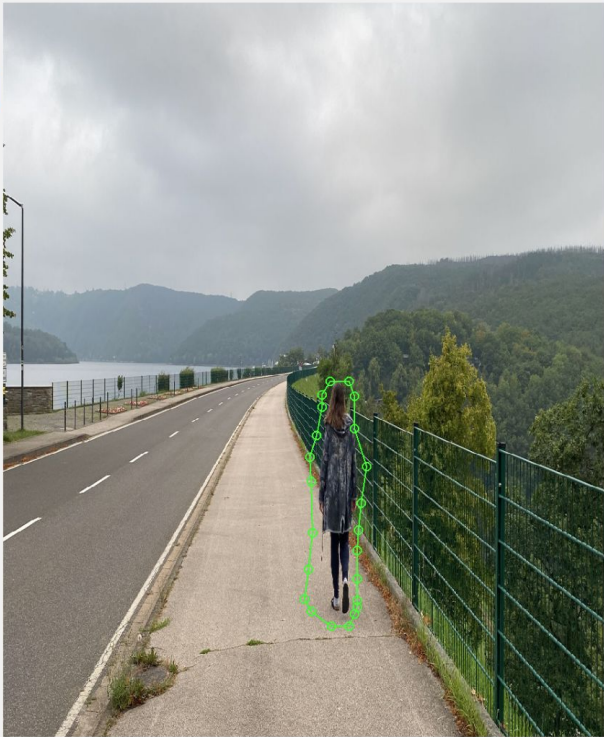
# Maskierung

☐ Everything besides Area is masked

☒ Area is masked

|   | 1      | 2      | 3      |
|---|--------|--------|--------|
| 1 | Area 1 | Delete | Masked |

New Area





# Logdaten

Logger X

All

Error

Debug

Warning

Profiler X

|   | Entry              | Values (ms) | Change (ms) | Avg 10 (ms) | Avg 100 (ms) |
|---|--------------------|-------------|-------------|-------------|--------------|
| 1 | Optical_Detecto... | 10.0        | 0.4         | 12.30       | 10.9         |
| 2 | Input:ReadFrame    | 0.0         | 1.4         | 12          | 1.9          |
| 3 | Preprocess         | 5.0         | 0.4         | 6.0         | 6.9          |
| 4 | Postprocess: ...   | 8.0         | 0.8         | 7.30        | 8.9          |



# Diagramm

Select Class

Car

Select Camera

Cam 1

From:

To

01.01.2000

01.01.2000

☐ Live

Save

**Fragen?**

