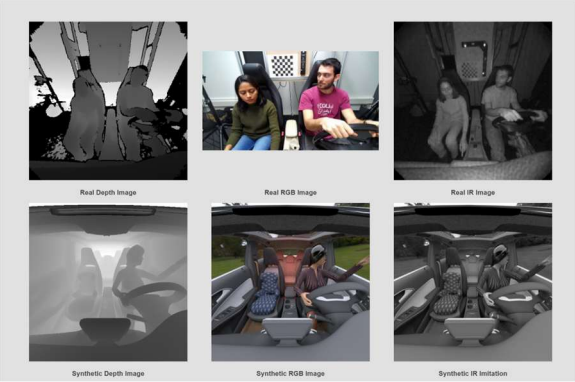
데이터셋

VIZTA Time of Flight Dataset

https://vizta-tof.kl.dfki.de/cabin-dataset/

차량 내부 데이터셋 제공



DMD.
Driver Monitoring
Dataset

https://dmd.vicomtech.org/

차량 모니터링 데이터셋 (학술목적 사용가능)

https://www.vicomtech.org/en/news/detail/562_vicomtech-develops-the-driver-monitoring-dataset-dmd-an-opensource-driver-monitoring-system-now-available-for-academic-and-scientific-use

차량 모니터링 데이터셋

https://www.kaggle.com/datasets/smartcity12/adms-dataset

졸거나, 휴대폰하는 등의 사진

https://www.aihub.or.kr/aihubdata/data/view.do?currMenu=115&topMenu=100&aihubDataSe=data&dataSetSn=83

한국인 안면 이미지 제공

https://www.aihub.or.kr/aihubdata/data/view.do?currMenu=115&topMenu=100&dataSetSn=651

운전자 및 탑승자 상태 및 이상행동 모니터링 데이터셋

관련논문

Seat Belt Fastness Detection Based on Image Analysis from Vehicle In-abin Camera

https://ieeexplore.ieee.org/document/9087474

```
net.optimized_memory = 0
batch = 32, time_steps = 1, train = 1
   layer   filters  size/strd(dil)      input                output
   0 conv     16       3 x 3/ 1    416 x 416 x   3 ->  416 x 416 x  16 0.150 BF
   1 max               2x 2/ 2    416 x 416 x  16 ->  208 x 208 x  16 0.003 BF
   2 conv     32       3 x 3/ 1    208 x 208 x  16 ->  208 x 208 x  32 0.399 BF
   3 max               2x 2/ 2    208 x 208 x  32 ->  104 x 104 x  32 0.001 BF
   4 conv     64       3 x 3/ 1    104 x 104 x  32 ->  104 x 104 x  64 0.399 BF
   5 max               2x 2/ 2    104 x 104 x  64 ->   52 x  52 x  64 0.001 BF
   6 conv    128       3 x 3/ 1     52 x  52 x  64 ->   52 x  52 x 128 0.399 BF
   7 max               2x 2/ 2     52 x  52 x 128 ->   26 x  26 x 128 0.000 BF
   8 conv    256       3 x 3/ 1     26 x  26 x 128 ->   26 x  26 x 256 0.399 BF
   9 max               2x 2/ 2     26 x  26 x 256 ->   13 x  13 x 256 0.000 BF
  10 conv    512       3 x 3/ 1     13 x  13 x 256 ->   13 x  13 x 512 0.399 BF
  11 max               2x 2/ 1     13 x  13 x 512 ->   13 x  13 x 512 0.000 BF
  12 conv   1024       3 x 3/ 1     13 x  13 x 512 ->   13 x  13 x1024 1.595 BF
  13 conv    256       1 x 1/ 1     13 x  13 x1024 ->   13 x  13 x 256 0.089 BF
  14 conv    512       3 x 3/ 1     13 x  13 x 256 ->   13 x  13 x 512 0.399 BF
  15 conv     21       1 x 1/ 1     13 x  13 x 512 ->   13 x  13 x  21 0.004 BF
  16 yolo
[yolo] params: iou loss: mse (2), iou_norm: 0.75, cls_norm: 1.00, scale_x_y: 1.00
  17 route  13                                  ->   13 x  13 x 256
  18 conv    128       1 x 1/ 1     13 x  13 x 256 ->   13 x  13 x 128 0.011 BF
  19 upsample                 2x    13 x  13 x 128 ->   26 x  26 x 128
  20 route  19 8                               ->   26 x  26 x 384
  21 conv    256       3 x 3/ 1     26 x  26 x 384 ->   26 x  26 x 256 1.196 BF
  22 conv     21       1 x 1/ 1     26 x  26 x 256 ->   26 x  26 x  21 0.007 BF
  23 yolo
[yolo] params: iou loss: mse (2), iou_norm: 0.75, cls_norm: 1.00, scale_x_y: 1.00
```

Fig. 8. The proposed neural network model

Driver Distracted Behavior Detection Technology with YOLO-Based Deep Learning Networks

https://ieeexplore.ieee.org/document/9652435

YOLO를 활용한 졸음, 휴대폰사용 감지

Seatbelt and Mobile Phone Detection with YOLOv5 for Driver Safety Monitoring

https://zenodo.org/records/11183963

YOLO를 활용한 졸음, 휴대폰사용 감지

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얼굴 및 졸음 인식 모델 기반 음주 및 졸음 감지 모니터링 시스템 구현

https://www.dbpia.co.kr/journal/articleDetail?nodeId=NODE12125030

OpenCV, dlib 를 이용한 졸음감지

ChatGPT와 영상처리를 이용한 졸음 감지 시스템

https://www.dbpia.co.kr/journal/articleDetail?nodeId=NODE11711718

PERCLOS 공식을 활용한 졸음감지

https://arxiv.org/abs/2507.04306