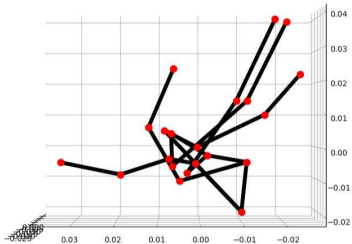
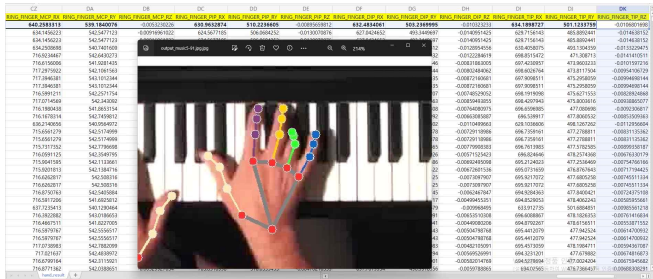


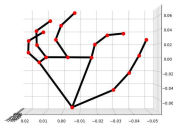
# 3D hand pose estimation

2023/09/11

# Why Accuracy ↓?

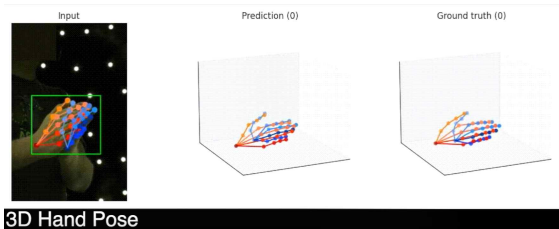


- 오른손 4번째 손가락(Ring Finger)과 같이 피아노를 칠 때 landmark가 특정 영역에 몰릴때 3차원으로 보면 위 그림처럼 그려지는 데, 이런 값들이 학습 데이터에 많아서 정확도에 문제가 있을 것 같다고 생각합니다.



- 정상적으로 estimation된 값으로 3d landmark 나타낸 이미지

# 1. MMPose



- GitHub: <https://github.com/open-mmlab/mmpose>
- Paper: <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9083948>

## 2. Deep Prior++

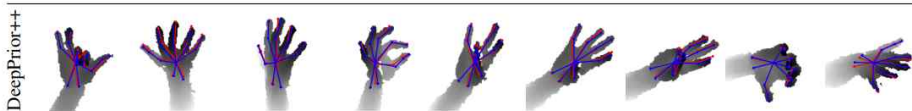


Figure 8: Qualitative comparison between DeepPrior and DeepPrior++ on the NYU dataset [40]. We show the inferred 3D joint locations projected on the depth images. Ground truth is shown in blue, the predicted poses in red. The results provided by DeepPrior++ are significantly better than the results from the original DeepPrior, especially on complex poses. (Best viewed in color)

- GitHub: <https://github.com/moberweger/deep-prior-pp>
- Paper: <https://arxiv.org/pdf/1708.08325.pdf>

### 3. DeepModel (Model-based Deep Hand Pose Estimation)



- GitHub: <https://github.com/xingyizhou/DeepModel>
- Paper: <https://arxiv.org/pdf/1606.06854.pdf>