

3D-DIP (2)

Thursday, 10 October 2019

10:35 AM

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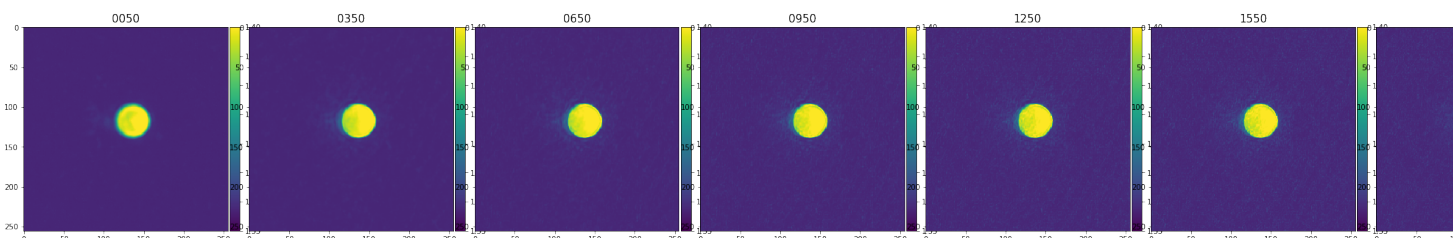
3D-DIP on silica bead

- 실험 내용: silica bead image에 3D-DIP를 적용하였다.
- 실험 이유:
 - 3D-DIP가 edge를 어떻게 처리하는지 확인하기 위해
 - 3D-DIP를 MIP에 적용했을때와 슬라이드별로 적용했을때의 차이를 확인하기 위해
- 실험 결과:
 - 3번서버 /home/user/jaeun/dip/bead에 있음
 - 서브디렉토리 이름이 샘플명

- ☐ 20180726.152050.859.SiO2_5um-005.hdf
- ☐ 20180726.152833.375.SiO2_5um-006.hdf
- ☐ 20180726.154243.040.SiO2_5um-007.hdf

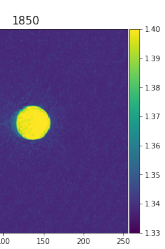
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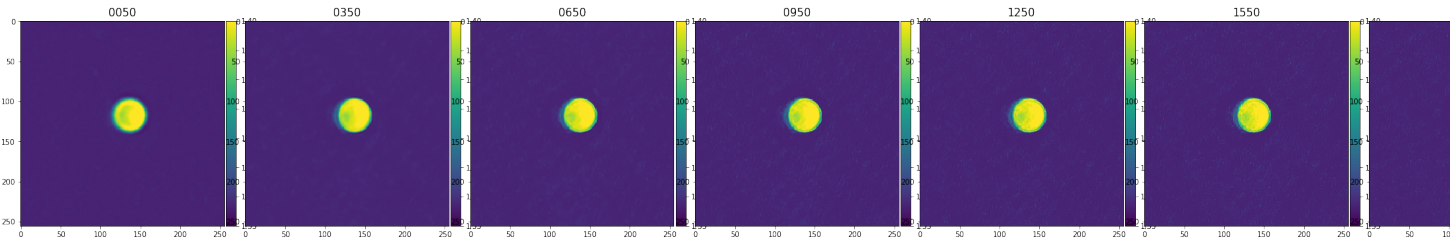
bead, MIP



bead, slice

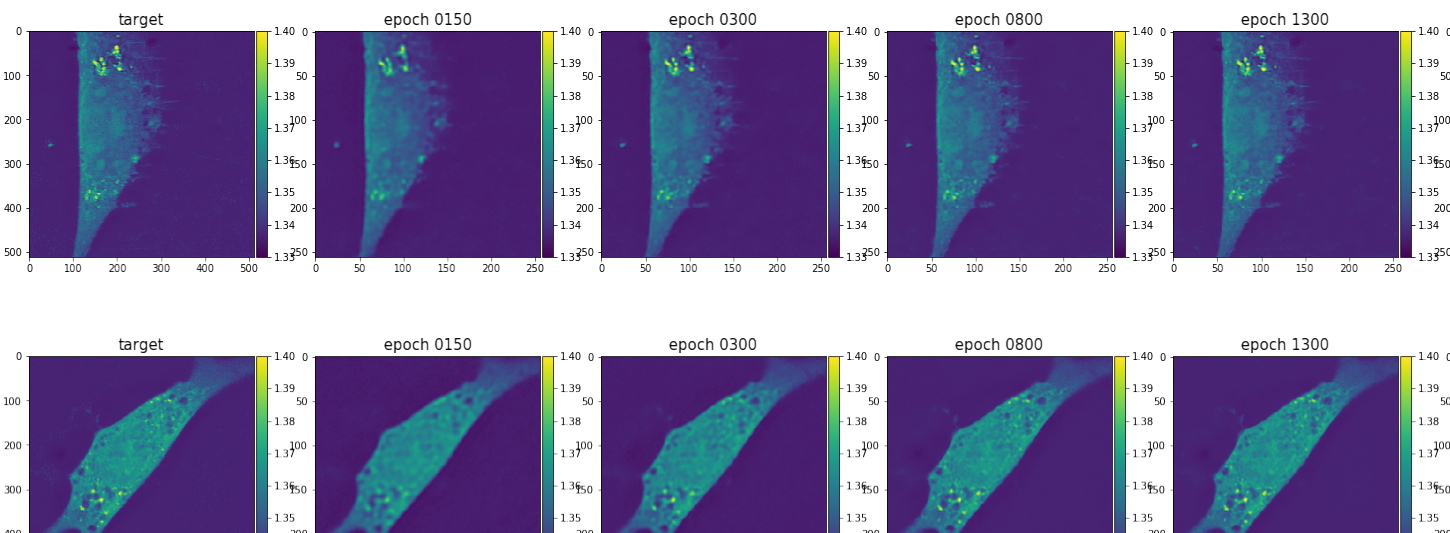
하기

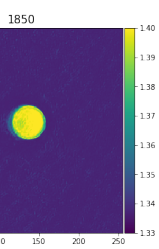




3D-DIP on larger input

- 실험 내용: 64*512*512크기의 이미지에 3D-DIP를 적용하였다.
- 실험 이유: 저번에 한 실험은 64*256*256크기의 이미지를 대상으로 했는데, 이 세포 전체가 아닌 일부분에 해당한다. 전체 세포에 대한 디노이징을 하기 위해 입력 이미지 크기를 늘렸다.
- 시도한 방법
 - 1) 64*512*512크기의 이미지를 zoom out하여 64*256*256크기로 만든 다음 3D-DIP를 적용한다.
 - 2) 입력 이미지의 크기는 그대로 64*256*256으로 두고, 모델의 feature map 크기를 줄여서 학습시킨다.
- 실험 결과
 - 방법 1은 잘 작동하였다.
 - 방법 2는 feature map의 크기를 아무리 줄여도 메모리 에러가 나서 불가 (자세한 내용은 활동일지에)



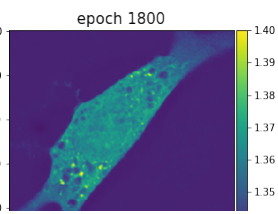
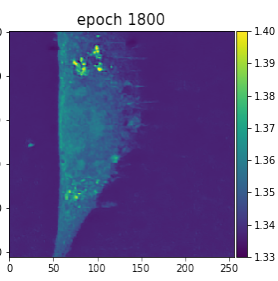


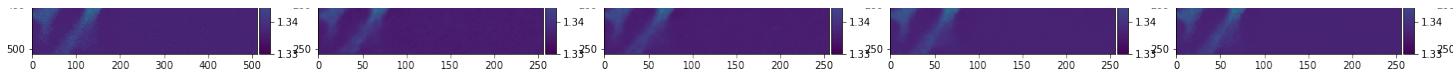
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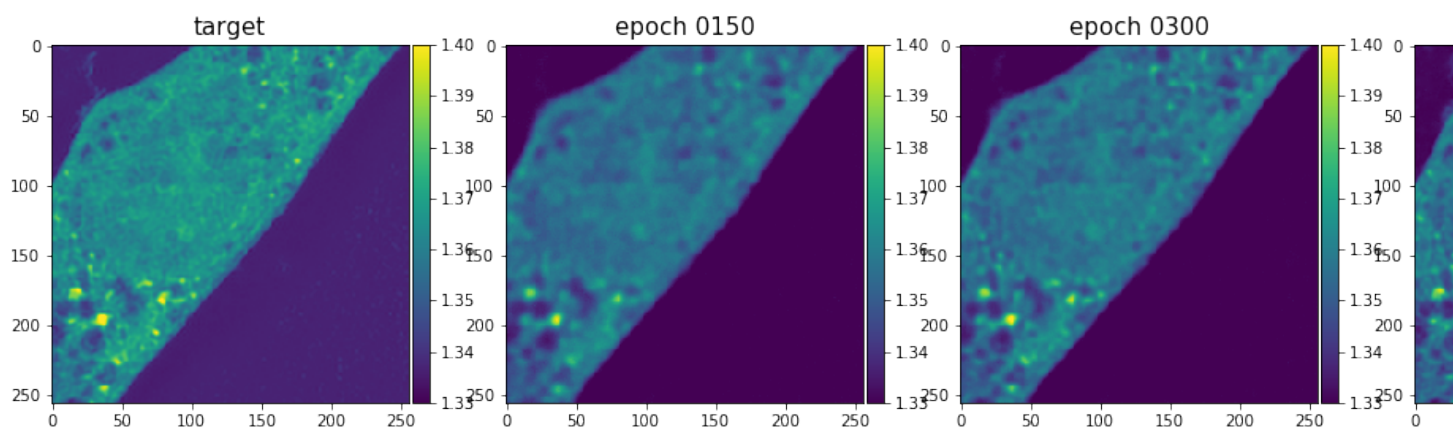
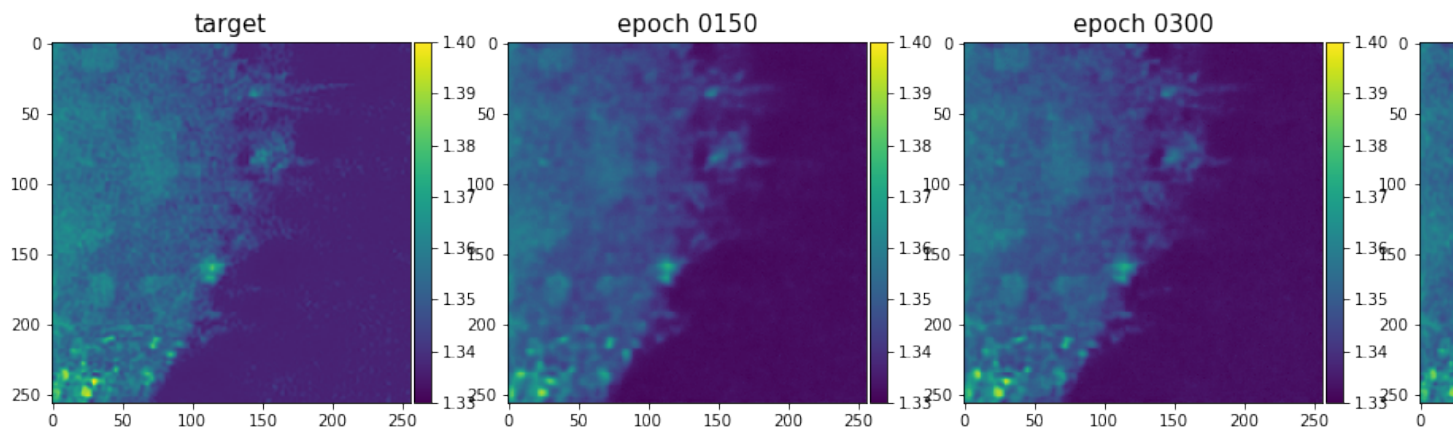
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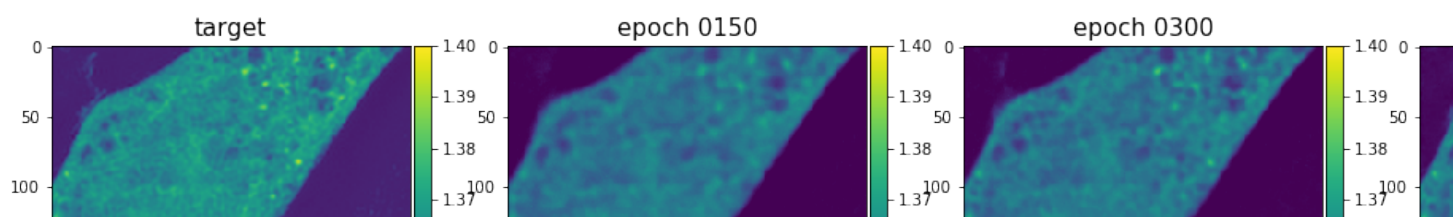
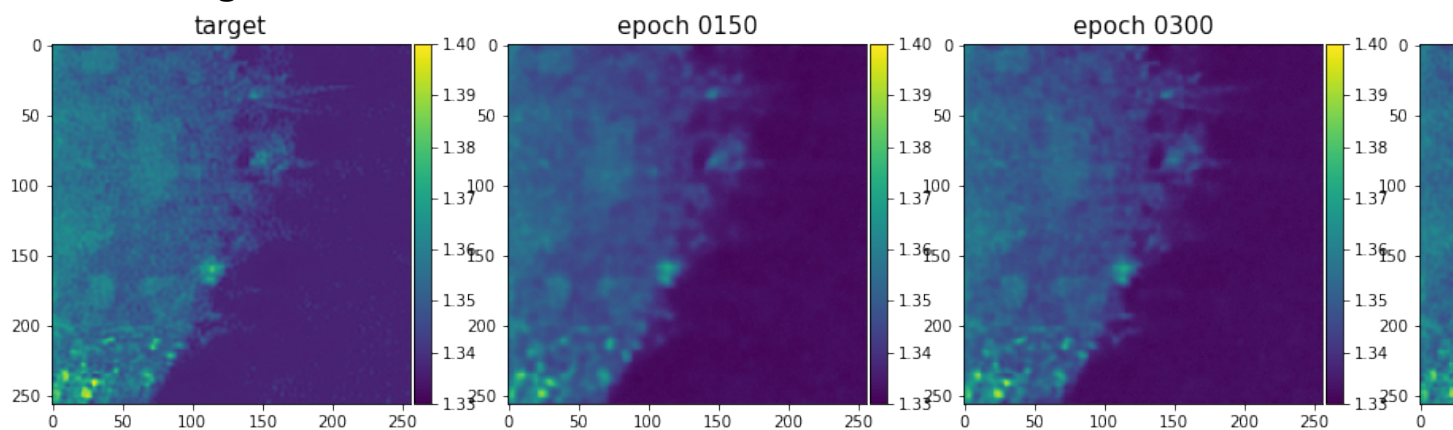


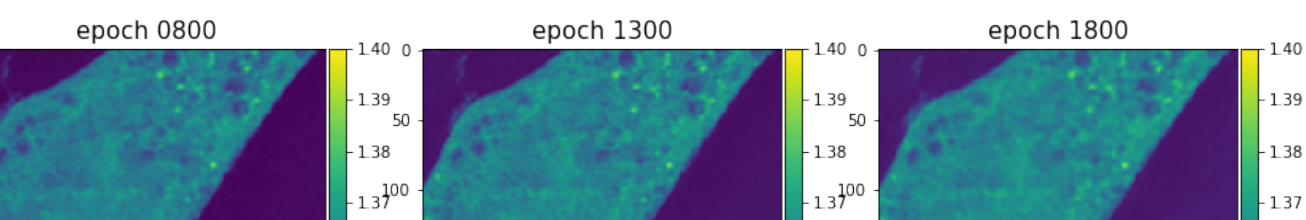
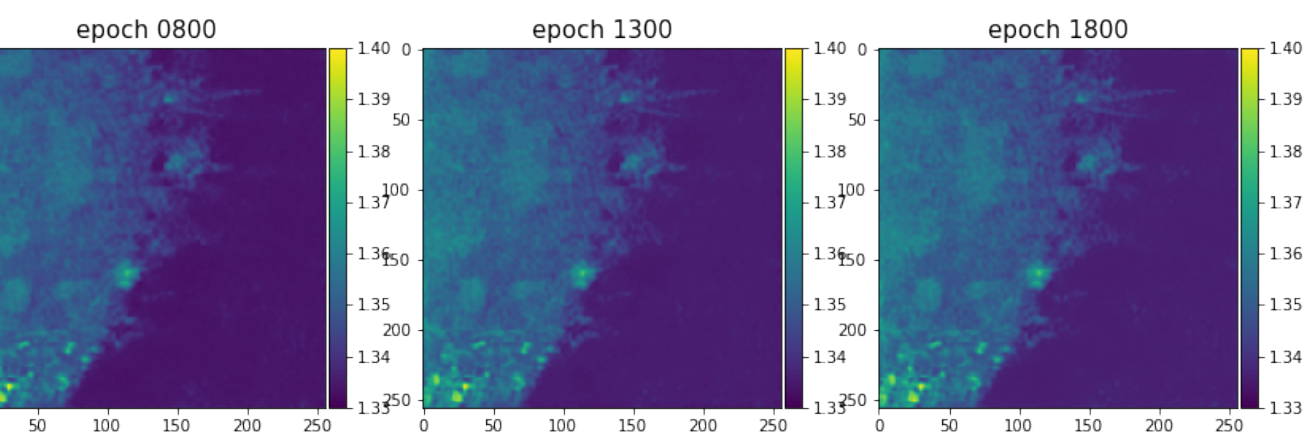
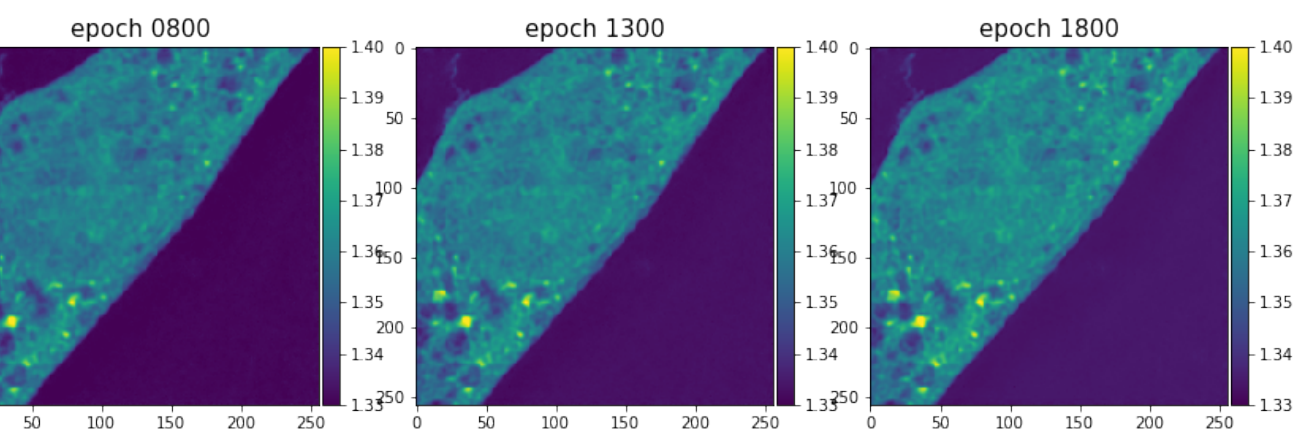
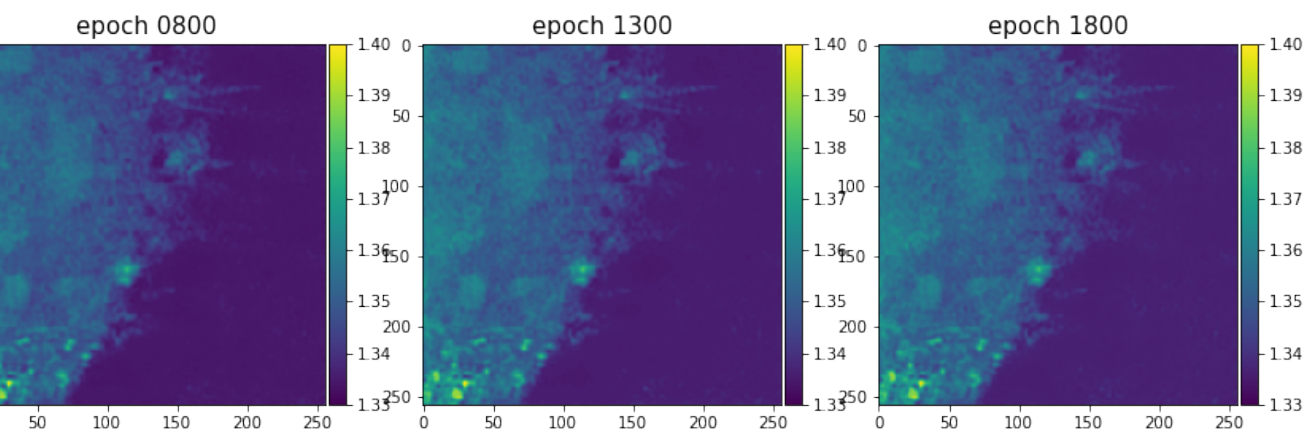
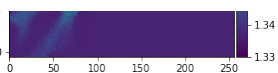
3D-DIP with TV regularization

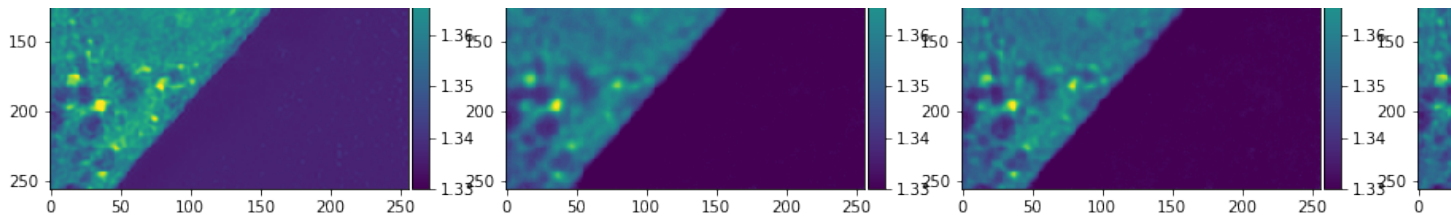
- TV_weight 0.1



- TV_weight 0.2







- TV_weight 0.3

