

Inductive bias on networks

- Scale Invariant [Ghosh and Gupta, 2019]
- Rotation Invariant [Hong et al., 2022, Kim et al., 2020]
- viewpoint invariance [De Sousa Ribeiro et al., 2020]

**Complex and fixed
modification of the
architecture for
classification tasks**

Improving the representation in the skip connections (encoder-decoder)

- Pai-Net [Wang et al., 2021]
- Unet++ [Zhou et al., 2018a]
- DRU-net [Jafari et al., 2020]
- Sharp U-Net [Zunair and Hamza, 2021]
- MultiResUNet [Ibt, 2020]

**Significantly increasing the
complexity of the network**

Ensemble methods and modified training expose varied data views to handle variability

- Multiple Networks [Dushatskiy et al., 2022]
- Texture invariant [Kim and Byun, 2020, Wang and Li, 2023]
- Rotation invariant [Kang, 2020]

**Multiple networks increase
complexity.**

**Medical Image
Variability**

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graph LR; A[Medical Image Variability] --> B[Inductive bias on networks]; A --> C[Improving the representation in the skip connections (encoder-decoder)]; A --> D[Ensemble methods and modified training expose varied data views to handle variability];
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