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Automatic estimatin of 3D pose from a signle image

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I decided to work on my one on project D named : **Automatic estimatin of 3D pose from a signle image**. The plan of the work is the following :

- Obtain 2d detections using stacked hourglass network of Newell et al. [1] pre-trained on MPII dataset. Fine tune on Human3.6M dataset using the parameters of Martinez et al [2].
- Implement the mapping between 2d points and 3d points as decribed in [2].
- Test the imeplentation of the Human3D dataset and characterize the working conditions and failures modes
- Extend to video by fixing the shape and optimizing the pose
- Test on the shorter manipulations videos dataset, and characterize the working conditions and failures modes

Références

[1] A. Newell, K. Yang et J. Deng, "Stacked hourglass networks for human pose estimation", in *European Conference on Computer Vision*, Springer, 2016, p. 483–499.

[2] J. Martinez, R. Hossain, J. Romero et J. J. Little, "A simple yet effective baseline for 3d human pose estimation", *arXiv preprint arXiv :1705.03098*, 2017.