

## Parametric Template-Based 3D Reconstruction of the Human Body

**Authors :** Jiahe Liu, Hongyang Yu, Feng Qian, Miao Luo, Linhang Zhu

**Abstract :** This study proposed a 3D human body reconstruction method, which integrates multi-view joint information into a set of joints and processes it with a parametric human body template. Firstly, we obtained human body image information captured from multiple perspectives. The multi-view information can avoid self-occlusion and occlusion problems during the reconstruction process. Then, we used the MvP algorithm to integrate multi-view joint information into a set of joints. Next, we used the parametric human body template SMPL-X to obtain more accurate three-dimensional human body reconstruction results. Compared with the traditional single-view parametric human body template reconstruction, this method significantly improved the accuracy and stability of the reconstruction.

**Keywords :** parametric human body templates, reconstruction of the human body, multi-view, joint

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