



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

PhD Student Seminar

**Learning to Reconstruct Crowd People
3D Pose from Synthetic Data**

By

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Abstract

We introduce a new task of learning to estimate the 3D pose of crowds from synthetic data. Existing learning-based methods rely on 2D-3D ground-truth data pairs for training, which are hard and expensive to annotate, especially for crowded scenes. To overcome this limitation, we propose a novel learning strategy that leverages abundant mocap data to generate diverse multi-view multi-person heatmaps and uses them as free input for model training. Our study demonstrates that this strategy can effectively increase the diversity and difficulty of the training data while maintaining consistency with real captured data. The model trained with our method can be directly applied to real systems without any need for finetuning. Preliminary experiments show that our method surpasses previous state-of-the-art methods on CHI3D Datasets.

Date : 4 May 2023 (Thursday)

Time : 6:00 pm

Venue : Room 4475 (Lifts 25/26)

All are Welcome!