A COMPARATION EXPERIMENTS

For the Volleyball dataset, we make appropriate modifications to JRDB-PAR and AdaFPP, which are originally designed for multi-granularity panoramic activity recognition (PAR). Table 1 presents the results of modified methods in comparison with other state-of-the-art methods, specifically focusing on group activity recognition (GAR). As shown in the table, the performance of JRDB-PAR and AdaFPP on the Volleyball dataset exhibits a slight decrease to that of other methods. This disparity stems from the significant differences between volleyball scenes and panoramic scenes, where in volleyball scenes, the actions of all players are interrelated and form a coherent global activity, while panoramic scenes involve more crowded individuals and complex social group activities.

Table 1: Comparison with the state-of-the-art methods on the Volleyball dataset. The superscript * denotes that the method is specific to PAR.

Method	Backbone	MCA
StagNet	VGG-16	89.3
AT	ResNet-18	90.0
HIGCIN	ResNet-18	91.4
ARG	ResNet-18	91.1
JRDB-PAR*	Inception-v3	78.6
AdaFPP*	ResNet-18	81.0

B PARAMETERS

B.1 FLOPs and Params

Table 2 presents our proposed method alongside some comparative methods, detailing the Params and FLOPs. Specifically, AT, HIGCIN, Dynamic, and ARG represent state-of-the-art methods for group activity recognition (GAR), while JRDB-PAR and MUP are focused on panoramic activity recognition (PAR). It is apparent that methods targeting multi-granularity PAR demand more Params than other GAR methods.

Table 2: The FLOPs and Params of the proposed method and some comparative methods. The superscript * denotes that the method is specific to PAR.

Method	FLOPs	Params
AT	432G	79M
HIGCIN	771G	98M
Dynamic	432G	74M
ARG	433G	96M
JRDB-PAR*	360G	480M
MUP*	544G	176M
AdaFPP*	631G	287M

B.2 Influence of Varying Weight Parameter λ.

Fig. 1 shows the influence of the varying weight parameter λ of detection loss in the overall training loss. The parameter λ aims to balance the contributions of the loss term. From the results, the optimal value of parameter λ is 1×10^{-3} for JRDB-PAR dataset.

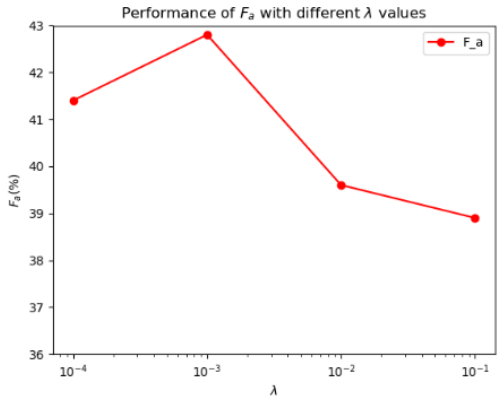

Figure 1: The impact of the varying parameter λ.