

Poster for ICPR 2020

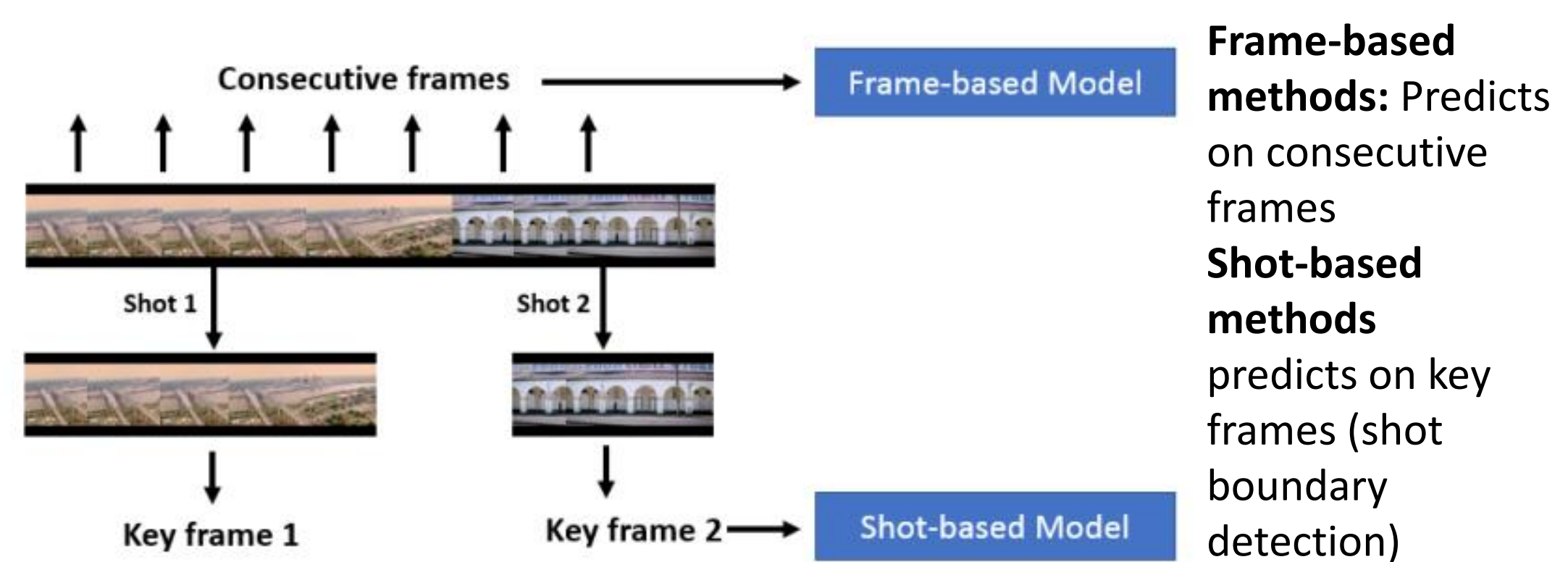
Video Representation Fusion Network For Multi-Label Movie Genre Classification

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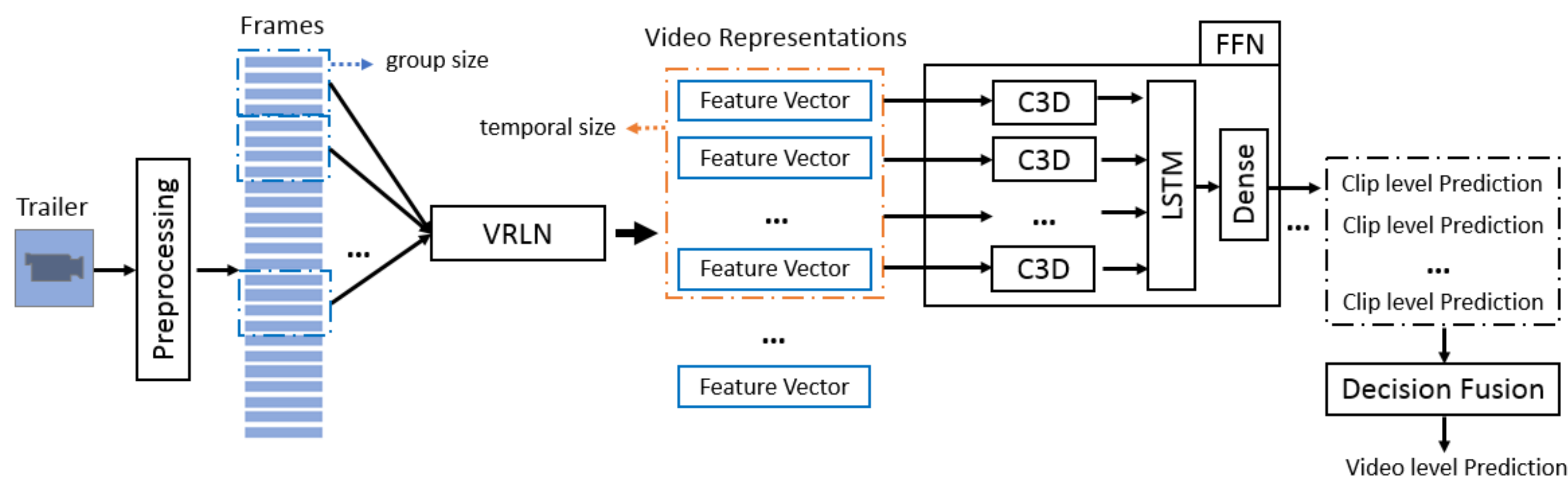
Abstract

- Movie genre classification plays a fundamental role in movie analysis as it generates metadata from movies that can be used for movie indexing, tagging, and recommendation
- Different from the previous works, which use frame-level features for movie genre classification, our approach uses video classification architecture to create video-level features from a group of frames and fuse these features temporally to learn long-term spatiotemporal information for the movie genre classification task.
- Experimental results demonstrate the effectiveness of our method. Our best model outperforms state-of-the-art method by 3.4% (AUPRC-macro).

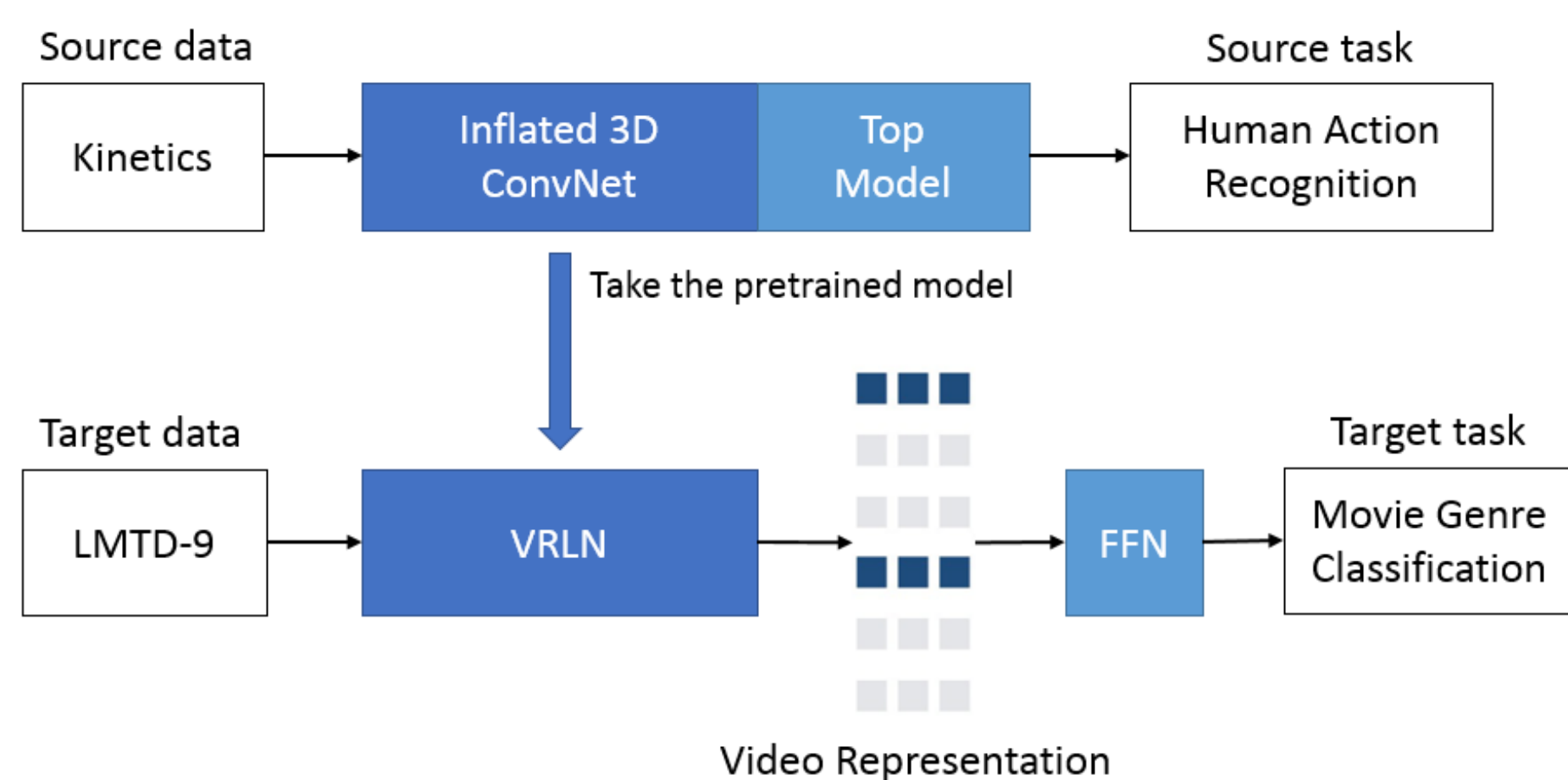
Existing Methods



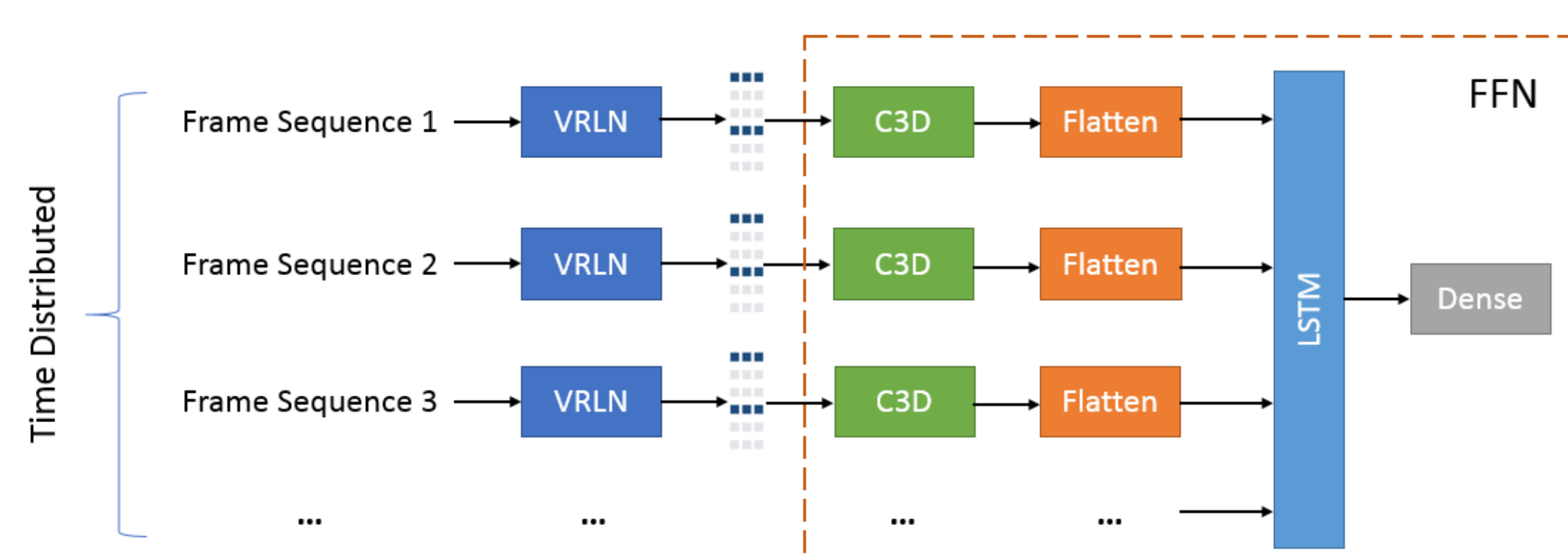
Video Representation Fusion Network



VRLN



FFN



Experimental Results

LMTD-9 DATASET [5].

Genre	Train	Validation	Test
Action	611	78	164
Adventure	432	51	108
Comedy	1109	148	301
Crime	477	59	121
Drama	1437	192	394
Horror	324	33	78
Romance	468	59	122
SciFi	229	26	57
Thriller	502	61	129
Total	2861	374	772

COMPARING RESULTS WITH STATE-OF-THE-ART METHODS [5].

Models	AUPRC (macro)	AUPRC (micro)	AUPRC (weighted)	Architecture
CTT-MMC-A[5]	0.618	0.712	0.683	CTT+FC
CTT-MMC-B[5]	0.599	0.704	0.661	CTT+2FC
CTT-MMC-C[5]	0.624	0.722	0.697	CTT+Maxout
VRLN2-64-10	0.645	0.747	0.721	VRLN+FFN

