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Introduction

这是一本私人笔记

LearnGitBook

Chapter1.1

GNN

DFF: Deep Feature Flow for Video Recognition

Question: per-frame evaluation is too slow and unaffordable

Solution: run expensive convolutional sub-network only on sparse **key frames (关键帧)** and propagates their deep feature maps to other frames via a **flow field (流域)**.

- Decompose neural network \mathcal{N} into **feature network** and **task network**
- Run \mathcal{N}_{feat} only on key-frame and propagate featuremap to following non-key frame

Deep Feature Flow

- feature propagation function (特征传播函数)

```
$$ \mathbf{bf}_i = \mathcal{W}(\mathbf{f}_k, M_{i \rightarrow k}, S_{i \rightarrow k})
```

```
$$
```

- where $M_{i \rightarrow k}$ is a two dimensional flow field
-

