PROJECT TITLE: Video Summarization - Key frame extraction

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Project Description

Extracting important part of videos and creating video skims (highlights) is an active research area in computer vision - deep learning. In this project, the undergraduate student will work with graduate students under supervision of Dr. Norouzi to do the following tasks:

1) Video Frame Feature Extraction
2) Video Shot detection
3) Video Shot encoding
4) Video Shot importance prediction
5) Video Skim creation.

The basic knowledge of Python programming is required and the main development will be done in PyTorch.