

ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
ENGINEERING AND APPLIED SCIENCE

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students

APPLICATION DEADLINE: 02/25/2022

PROJECT TITLE: Video Summarization - Key frame extraction

Mehdi Norouzi
Associate Professor - Educator (Lab37)
Department of Electrical Engineering and
Computer Science
830 Old Chem
University of Cincinnati, Cincinnati, OH
(513)-549-3435
norouzmi@ucmail.uc.edu

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.