ELECTRICAL AND COMPUTER ENGINEERING
ENGINEERING AND APPLIED SCIENCE

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students

APPLICATION DEADLINE: 03/01/2023

PROJECT TITLE: Video Summary Generation

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

There are multiple algorithms for generating video summaries; e.g., we can create a summary (highlight) of a soccer game based on the critical shots, goals, or even audience voice.

In this project, the undergraduate student will work with graduate students under the supervision of Dr. Norouzi to do the following tasks:

1) Form a video summary generation as a knapsack problem  
2) Implement an algorithm to generate a video summary  
3) Evaluate the effect of shot boundaries on the video summary

Basic Python programming knowledge is required.