A Synopsis On

"Geotagging Of all Educational Institutions With Virtual Tour"

Submitted By

Kshitija Kalbande

Shraddha Kamble

Vedaanti Badwaik

Asmita Pawar

Guided By

Prof. Sakshi khamankar

DEPARTMENT OF COMPUTER ENGINEERING

CUMMINS COLLEGE OF ENGINEERING FOR WOMEN, NAGPUR

2021-22

Geotagging Of all Educational Institutions With Virtual Tour

ABSTRACT

The association of geographical tags to multimedia resources enables browsing and searching online multimedia repositories using geographical criteria, but millions of already online but non geotagged videos and images remain invisible to the eyes of this type of systems. This situation calls for the development of automatic geotagging techniques capable of estimating the location where a video or image was taken. This project presents a geo-tagging system for 360° videos based on extracting and expanding the geographical information contained in the textual metadata and on visual similarity criteria. The system is specifically designed to geo tag and showcase 360° videos for virtual tour of colleges.

INTRODUCTION

An increasingly popular way of experiencing remote places is by viewing 360° virtual tour videos, which shows the surrounding view while traveling through an environment. However, finding particular locations in these videos can be difficult because current interfaces rely on distorted frame previews for navigation. To alleviate this usability issue, we propose a method for easy navigation within the videos. We present a video player interface using a navigation timeline. For instance, if the user searches for a particular college he/she will be redirected to the navigation pane initially where he/she can select the place to explore. Places within the college will be divided and added to the navigation pane for easy exploration.

PROBLEM DEFINITION & SCOPE

The project has a great scope as it will help students as well as other users to navigate through the college or institute from anywhere in the world without actually being present there. This will be similar to Street View by Google where user can take virtual tour of Colleges/Institutes instead of the street.

AIM & OBJECTIVE

To design and develop a system for Geo Tagging of 360° videos of colleges and institutes for the following objectives:

1. Virtual tour of Colleges/Institutes without actually being present there.

2. Information regarding facilities provided by Colleges.

METHODOLOGY PLANNED

Web Development

MERN technology

REFERENCES

[1] Aseem Agarwala, Maneesh Agrawala, Michael Cohen, David Salesin, and Richard Szeliski. 2006. Photographing long scenes with multi-viewpoint panoramas. In ACM SIGGRAPH 2006 Papers. 853–861.Google Scholar Digital Library

[2] Luigi Bagnato, Pascal Frossard, and Pierre Vandergheynst. 2009. Optical flow and depth from motion for omnidirectional images using a tv-l1 variational framework on graphs. In 2009 16th IEEE International Conference on Image Processing (ICIP). IEEE, 1469–1472. Google Scholar Cross Ref

[3] Werner Bailer, Christian Schober, and Georg Thallinger. 2006. Video Content Browsing Based on Iterative Feature Clustering for Rushes Exploitation. In TRECVID. Cite seer. Google Scholar

[4] Connelly Barnes, Dan B Goldman, Eli Shechtman, and Adam Finkelstein. 2010. Video tapestries with continuous temporal zoom. In ACM SIGGRAPH 2010 papers. 1–9. Google Scholar Digital Library

[5] Wutthigrai Boonsuk, Stephen Gilbert, and Jonathan Kelly. 2012. The impact of three interfaces for 360-degree video on spatial cognition.In Proceedings of the SIGCHI conference on human factors in computing systems. 2579–2588.