Statement of Purpose

I studied computer science broadly while doing B.Tech from Uttar Pradesh Technical University, Lucknow in 2005. I excelled in programming during my graduation. I am currently working as assistant professor in department of CEA at GLA University, Mathura. I believe in explorative attitude, leads to a constant learning process. I completed my M.Tech in 2013 from GLA University, Mathura. My primary area of research interest is in the field of Computer vision and Image analysis. I look to doctorate degree to refine my knowledge and skills in my areas of interest. I believe it will also serve to give direction to my goal of a career as a research professional at an academic or research-oriented organization. I plan to continue the research after Ph.D., as a faculty in academia.

While in M.Tech, I have worked over surveillance video analysis. I proposed a framework to extract key frames from surveillance video efficiently. During the project, I studied computer vision concepts like Optical flow etc and practically implemented them. This experience convinced me that my interest is in Computer Vision. I have earned programming certificates and published papers in the field of Computer Vision.

Further, I would like to insert a few qualities, which may describe me the best. Firstly, I have strong programming attitude. I always try my own hands to solve a problem. I program it and find issues of the problem. I pilot, several graduate level projects. Secondly, I enjoy teaching, which is the best way to improve the skills. I worked on various assignments for improvement of teaching pedagogy. My teaching experiences gave me a strong foundation on various subjects, especially object oriented system, C programming and data structure and trained me to design easy-to-understand slides, documents, reports and notes. Finally, I have a strong programming attitude and familiar with many software development technologies and tools like Open CV/Matlab/Java/C/C++. I have spent my spare time in learning implementation techniques from web-resources. I want to continue my studies in the area of interest and want to gain knowledge in this filed.

My furthest research goal is to establish useful theorems and software in the field of computer vision. I believe it to be one of the best ways to make the world advance. I am interested to propose efficient algorithms and models for artificial intelligence in computer vision.

Currently, I am working over surveillance video. In Today's scenario the most of surveillance systems are operated manually. The effectiveness of surveillance for rapid response to security threats is mainly relies on trained security personnel. The security personnel are supposed to monitor many videos feeds at same time. It is a tedious task for security personnel to concentrate in the low traffic situations. They may lapse attention. In post video analysis, it is a tedious task to review the complete surveillance video. The automatic surveillance video summarization is a need to increase the effectiveness of surveillance monitoring.

Even, this research area can also be used to monitor a surveillance system and generate alarms at the time of security threat. If this area will be explored then it can help us in preventing undue incidents against women.

Publications:

Journal Papers:

[1] Suresh Chandra Raikwar, Charul Bhatnagar & Anand Singh Singh Jalal,   "A Novel Framework for Efficient Extraction of Meaningful Key Frames from Surveillance Video", *International Journal of System Dynamics Applications*, vol.4, No.2, pp.56-73, April-June 2015.

Conference Papers:

[1] Suresh C. Raikwar, Charul Bhatnagar & Anand Singh Jalal, "A Framework for Key Frame Extraction from Surveillance Video", *IEEE International Conference on Computer & Communication Technology (ICCCT)*, pp.297-300, 25-26 September, 2014.

[2] Ruchira Manke, Anand S. Jalal & Suresh C. Raikwar, "A Robust Approach for Salient Region Detection", *IEEE International Conference on Industrial and Information Systems*, pp.1-4, 2014.

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