

Proposal for VI Semester Project

Project Offered by / Name of Guide: Prof. Sweta Jain

PROJECT DETAILS

Project Title: “Diagnosis of Skin Cancer using Skin Lesion Images and Deep Learning”

Project Area: Computer Vision and Deep learning in healthcare.

Project Category: Reserch Based

Project Objective: An increasing number of genetic and metabolic anomalies have been determined to lead to cancer, generally fatal. Cancerous cells may spread to any body part, where they can be life-threatening. Skin cancer is one of the most common types of cancer, and its frequency is increasing worldwide. The main subtypes of skin cancer are squamous and basal cell carcinomas, and melanoma, which is clinically aggressive and responsible for most deaths. Therefore, skin cancer screening is necessary. One of the best methods to accurately and swiftly identify skin cancer is using deep learning (DL).

Function Specifications: [Deliverables]

In the proposed work, the deep learning method convolution neural network(CNN) will be used to detect the two primary types of tumors, malignant and benign, using the ISIC2018 dataset

Project Outcome: Diagnosis of Skin Cancer using Skin Lesion Images.

Technology: Deep Learning

Project Scope: Societal Application

Application Areas: Assistive technology for healthcare professionals.

Module for next semester: Transfer Learning will be adapted.

Future Scope: Real Time data Collection and deployment of the application in real life scenario.

Any other details: NA.