

Faculty Profile



Name: Dr K Susheel Kumar

Designation: Senior Assistant Professor

Teaching Areas: Compiler Design, Data Structure, Digital Image processing, machine learning

Research Interests: Medical Image Processing

Education

- PhD (CSE) NIT Hamirpur, Himachal Pradesh, 2023
- MTech (IT) IIIT ALLAHABAD, Uttar Pradesh, 2010
- B.E (CSE), MVSR ENGINEERING COLLEGE, HYDERABAD (OSMANIA University), 2007

Research / Selected Publications:

SCI Indexing:

1. Kumar, K. Susheel, & Singh, N. P. (2022). Analysis of retinal blood vessel segmentation techniques: a systematic survey. *Multimedia Tools and Applications*, 1-55.
2. Kumar, K. Susheel., & Singh, N. P. (2022). Segmentation of retinal blood vessel using generalized extreme value probability distribution function (pdf)-based matched filter approach. *Pattern Analysis and Applications*, 1-26.
3. Kumar, K. Susheel., & Singh, N. P. (2022). An Efficient Registration-based Approach for Retinal Blood Vessel Segmentation Using Generalized Pareto and Fatigue pdf. *Medical Engineering & Physics*, 103936.
4. Kumar, K. Susheel and Singh, N.P, (2023) Retinal Disease Prediction through Blood Vessel Segmentation and Classification Using Ensemble Based Deep Learning Approaches. *Neural Computing and Applications*.
5. Susheel Kumar, K., and Nagendra Pratap Singh(2023). "Identification of retinal diseases based on retinal blood vessel segmentation using Dagum PDF and feature-based machine learning.

Scopus Indexing:

6. Kumar, K. Susheel., & Singh, N. P. (2022). Segmentation of retinal blood vessel structure using Birnbaum-Saunders (fatigue life) probability distribution function. *International Journal of Medical Engineering and Informatics*, 14(6), 484-500.
7. Kumar, K. Susheel., & Singh, N. P. (2022). Retinal Blood Vessel Segmentation Using a Generalized Gamma Probability Distribution Function (PDF) of Matched Filtered. *International Journal of Fuzzy System Applications (IJFSA)*, 11(2), 1-1
8. Kumar, K. S., Yadav, S., & Pratap Singh, N. (2023). Screening Retinal Images and Extraction of the Retinal Blood Vessel for Identifying Diseases and Classification of Arteries and Veins by Using Deep Learning. *Recent Advances in Electrical & Electronic Engineering (Formerly Recent Patents on Electrical & Electronic Engineering)*, 16(8), 790-804.