

Faculty Profile

Dr. D Sujitha Juliet, M.E., Ph.D

Associate Professor,
Division of Data Science and Cyber Security
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Academic Background

Degree	University	Year
Ph.D	Karunya Inst of Technology and Sciences (Deemed to be University)	Sep 2014
M.E	Karunya Inst of Technology and Sciences, Affiliated to Anna University	Dec 2002
B.E	Karunya Institute of Technology, Bharathiyar University	April 2001

Courses Taught

- Natural Language Processing
- Machine Learning Techniques
- Artificial Intelligence for Mechanical Systems
- Intelligent systems
- Geometric Modelling and Design thinking
- Interactive Game Design
- Artificial Intelligence for Games

Research Interests

- Deep learning-based image recognition
- Medical Image Analysis
- Applied Natural Language Processing
- Emotion recognition for Human Computer Interaction
- Indoor Navigation system

Research Publications

- Published **72 research articles** in reputed journals including Soft computing, Pattern Recognition Letters, Journal of digital imaging, Signal image and video processing, Journal of real time image processing, Frontiers in Public Health and in International conferences indexed by Scopus
- Published book chapters in the areas of Telemedicine, facial emotion recognition and medical image analysis, published in Taylor & Francis Group, Wiley and Elsevier.

Most recent Publications in Journals

- Kurian, S.M., **Juliet, S.** (2023) 'An automatic and intelligent brain tumor detection using Lee sigma filtered histogram segmentation model'. *Soft Computing*, 27, 13305–13319 **IF: 4.1**
- Diana B., **Juliet, S** and Raj, M. (2023). 'An efficient lymphocytic leukemia detection based on EfficientNets and ensemble voting classifier', *International Journal of Imaging Systems and Technology*, 33 (1), pp: 419 – 426, **IF: 2.1**
- Raimond, K., Rao, G. B., **Juliet, S.**, Tamilarasi, S. R., Evangelin, P. S., & Mathew, L. (2022) 'An emerging paradigm on cervical cancer screening methods and devices for clinical trials', *Frontiers in Public Health*, Volume 1028, October 2022. **IF: 5.2**
- Shyam, S., **Juliet, S** and Ezra, K. (2022). 'Indoor positioning systems: A blessing for seamless object identification, monitoring, and tracking' *Frontiers in Public Health*, 10, **IF: 5.2**
- Joseph S. I., Sasikala J, and **Juliet, S.** (2019) "A novel vessel detection and classification algorithm using a deep learning neural network model with morphological processing", *Soft Computing*, 23(8), 2693-2700, **IF: 4.1**

Funded Research Project from DST

Research Projects sanctioned to the tune of Rs. 46,42,797:

- 'Development of Industrial Indoor Asset Positioning and Navigation System using Geospatial Analysis and Ultra-Wide Band Technology', funded by Department of Science and Technology (DST- NRDMS), costing Rs. 27,89,644/- with One Research Fellow (2020 -2023)
- 'SWASTHYA- Development of Cost Effective Affordable Cervical Cancer Screening Unit based on Smartphone Technology for Rural Population' funded by Department of Science and Technology (DST- BDTD), costing Rs. 18,53,153/- with One Research Fellow (2021-2023)

Patent published and Granted

- Invention published and granted in Indian Patent: "Industrial Indoor Asset Positioning and Navigation System" Ref.: 202241029347
- Invention published in Indian Patent: "A Device for Trapping Locust" Ref.:202141020431
- Invention published in Indian Patent: "Specnoscope Plus – An Indigenous cervical cancer screening unit", Ref No: 202241060190 A

Administrative responsibilities

- Served as IQAC coordinator from 2015 to 2018, and actively participated in Quality Assurance activities of the University.
- Served as Programme Coordinator for BTech AI&DS and Computer Engineering programmes of Dept of CSE from August 2022 to December 2023 .