SHWETHA S A

Assistant Professor

Experience (Teaching and Industry)

RNSIT (2026- till date)
Part-time Research Assistant (Sep 2024 – July 2025), National Dong Hwa University, Hualien, Taiwan.
Programmer (Sep 2022- May 2023), Nagarjuna College of Engineering &Technology, Bangalore.

Qualifications

B.E. from Sir M Visvesvaraya Instituteof Technology, Bangalore.
M.S. from National Dong Hwa University, Hualien, Taiwan.

Specialization (Academics)

Data Structures, C, DBMS, Machine Learning

Specialization (Research)

Machine Learning, Deep Learning, Computer Vision and Image Processing

Publications

1. Dr. Savita Choudhary, Harisha. C, Shalini. N, **Shwetha. S. A.**, "**Assistance Device for Visually Impaired People**", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 8, Issue VI, June 2020. ISSN: 2321-9653. http://doi.org/10.22214/ijraset.2020.6106 (SJIF Impact Factor: 8.067)

2. B. R. Radha Krushna, S. C. Sharma, A. Aashish, V. Priyadharshini Bala, Deepak Parhi, K. Manjunatha, Sheng Yun Wu, **S. A. Shwetha**, Bing-Li Lyu, Augustine George, H. Nagabhushana, "**A strategy to achieve stable biofuel assisted $CoCr_2O_4$:Mn^{2+} nano pigments and its demonstration for the detection of latent fingerprints through YOLOv8x deep learning model,**" *Surfaces and Interfaces*, vol. 72, pp. 107019, September (2025). https://doi.org/10.1016/j.surfin.2025.107019 (Scopus, Q1 and Impact Factor: 6.0)

3. B Prathibha, BR Radha Krushna, S Priyanka Chakradhar, SC Sharma, V Priyadharshini Bala, A Aashish, K Manjunatha, Sheng Yun Wu, **S. A. Shwetha**, Bing-Li Lyu, R Arunakumar, G Ramakrishna, Augustine George, H Nagabhushana "**Enhancing and quantifying luminescence contrast of fingerprints with Pr^{3+} doped nepheline nanophosphors empowered with real-time forensic analysis**" Journal of Luminescence, Vol. 291, pp.121716 March (2026). https://doi.org/10.1016/j.jlumin.2025.121716 (Scopus, Q2 and Impact Factor: 3.8)

Patents

1. K. Manjunatha, Akshay Arjun, **S. A. Shwetha**, C. Pandurangappa, **Cobalt Chromite Nanoparticle-Based Composition and Method for Daylight Development and Digital Analysis of Latent Fingerprints**, Application Number- 202641046680. (Published)
2. K. Manjunatha, Akshay Arjun, **S. A. Shwetha**, C. Pandurangappa, Shidaling Matteppanava, **Fe-Doped Cobalt Chromite Nanostructured Composition and Method for High-Resolution Daylight Visualization and Automated Minutiae Mapping of Latent Fingerprints**, Application Number- 202641048259. (Published)

3. K. Manjunatha, Shruti Verma, Akshay Arjun, **S. A. Shwetha**, "**Copper Ferrite Nanostructured Composition Synthesized via Co-Precipitation Method and an Integrated Approach for Daylight Visualization and Automated Digital Analysis of Latent Fingerprints**," Application Number- 202641049473. (Published)