# Dr. Sowmya Nag K

**Dr. Sowmya Nag K,** Assistant Professor **Educational Qualificaton:** 

B.E (Telecommunication Engineering)

M.Tech (Digital Electronics and Communication)

Ph.D (Image Processing)

**Experience:** Teaching: 13 Years.

**Area of Interest:** Signal and Image processing, Cryptography, Sensors.

Email ID: sowmyanagk@rvce.edu.in

Date of Joining at RVCE : 24.02.2014

**Publications:** 

#### A. Patent:

Real Time Seriplane Test System for Inspecting Raw Silk Threads using AI", No.202441074738, Filling date: 03-10-2024, Published in Jan 2025.

### **B.International Journals: 12**

1. Sowmya Nag K and Veenadevi S V"Precised Cashew Classification Using Machine Learning", Published in Engineering

Technology and Applied Science Research, Vol. 14, No. 5, 2024, 17414-17421, October-2024 (Q2 Journal and Scopus Indexed) DOI: <a href="https://doi.org/10.48084/etasr.8052">https://doi.org/10.48084/etasr.8052</a>.

2. Sowmya Nag K and Veenadevi S V "Implementation and Assessment of New Hybrid Model for Cashew Kernel Classification", Published in International journal of intelligent systems and applications in Engineering, Vol. 12 -No. 3, ISSN: 2147-67992, 2024(Q3 Journal and Scopus Indexed).

DOI: <a href="https://ijisae.org/index.php/IJISAE/article/view/5984">https://ijisae.org/index.php/IJISAE/article/view/5984</a>.

3. Sowmya Nag K and Veenadevi S V "Deep Learning Based System for of Grading Cashew Kernels", Published in International Journal of Scientific Research in Engineering and Management (IJSREM), Vol. 8 – Issue No. 6, ISSN: 2582-3930, June-2024 DOI: <a href="https://doi.org/10.55041/IJSREM35658">https://doi.org/10.55041/IJSREM35658</a>.

- 4. Sowmya Nag K and Veenadevi S V "Whole And Split Classification Of Cashew Kernels Using Hybrid Machine Learning Algorithm", JXAT,Issue-11, pp-248-257,2024(Q2 Journal) DOI:https://doi.org/10.37896/JXAT16.11/35115
- 5. Sowmya Nag K and Veenadevi S V "Classification in Cashew Grading System: A Systematic Review", Published in International Journal of Computer Applications, vol-185-No.25, July 2023(Scopus Indexed)

DOI: https://doi.org/10.5120/ijca2023923004

- 6. Sowmya Nag K and Veenadevi S V "Classification of Cashew Kernels into Wholes and Splits using Machine Vision Approach", Presented in International Conference on Recent Trends in Science and Technology-2023, Published in Journal of Propulsion Technology, Vol. 44 -No. 5, ISSN: 1001-4055, 2023(Q3 Journal and Scopus Indexed) DOI: https://doi.org/10.52783/tjipt.y44.i5.3013.
- 7. Sowmya Nag K"VLSI Implementation of Split-radix FFT for High Speed Applications", International Journal Of Computer Applications, 2017.
- 8.Sharvari T, Sowmya Nag K, "A study on Modern Messaging Systems- Kafka, RabbitMQ and NATS Streaming", Distributed, Parallel, and Cluster Computing.
- 9. Praveena B, Abhishek Sowmya Nag K, "ProMED Android Mobile Application for finding the Availability of Medicine", International Journal of Engineering Research & Technology (IJERT).
- 10. A R Rohan, Sowmya Nag K, "Development of Native Android Mobile application using MVVM Architecture", International Research Journal of Engineering and Technology (IRJET).
- 11. Mayank R,Sowmya Nag K"A Review on Hospitality Television in Hospitality Industry", International Journal of Innovative Research in Science, Engineering and Technology.
- 12. Suhas T M,Sowmya Nag K,"Continuous Integration and Continuous Deployment with Jenkins in C++ Software Development", Journal of University of Shanghai for Science and Technology

## C. International Conferences: 06

- 1 Sowmya Nag K"Implementation of Hybrid Crypto System for Data Encryption and
- . Decryption", IEEE conference on Recent Trends on Electronic, Information, communication & Technology (RTEICT).
- 2 Sowmya Nag K "Implementation of Pipelined Advanced Encryption Standard-192 using
- . Multiple Keys", "National Conference on Challenges in Research and Technology in the Coming Decades" conducted by Dept. of ECE, SDMIT, UJIRE, PP-15, Sept 27th, 2013.
- 3 Y Vishnusai, TR Kulakarni, Sowmya Nag K, "Ablation of Artificial Neural Networks",
- . International Conference on Innovative Data Communication Technologies and Application.
- 4 Rashmi K M ,Sowmya Nag K,"Implementation of Hybrid Crypto System for Data
- . Encryption and Decryption", IEEE conference on Recent Trends on Electronic, Information, communication & Technology (RTEICT)
- 5 Sowmya Nag K,"Cyber Security Validation of Wireless Embedded Application using
- . Packet Fuzz Testing", Microelectronics, Computing & Communication Systems(MCCS-2021).
- 6 Sowmya Nag K"Automation in Backend and Frontend using SNMP and .NET
- . Framework", Microelectronics, Computing & Communication Systems(MCCS-2021).

## D. National Conferences: 02

- Sowmya Nag K, "Implementation of Pipelined Advanced Encryption Standard-128 using Multiple Keys", "National Conference on VLSI Communication and Computer Networking(VCCN-1)" conducted by Dept. of ECE, AMC Engineering College, PP-83,May 3<sup>rd</sup>,2013.
- 2 Sowmya Nag K2. "Implementation of Pipelined Advanced Encryption Standard-192
- using Multiple Keys", "National Conference on Challenges in Research and Technology in the Coming Decades" conducted by Dept. of ECE, SDMIT, UJIRE, PP-15, Sept 27th, 2013.

E. Book Chapter:

KU Sankangoudar, Sowmya Nag K, A Sharma "Implementation of UVM Agents for Hexagon

Subsystem RTL", Lecture Notes in Networks and Systems.

F.Text Book Published:

Authored text Book "Control Systems" I.K. International Pvt Ltd, New Delhi, ISBN:

978-93-90620-70-8, Febraury 2022.

G. Projects Proposal:

1. Approved 15 Lakhs proposal on "Development of Automated Detection and Grading of

Cashew Kernels using AI Approach under MSME, Feb 2024.

2. Approved 12 Lakh proposal on "Studies on use of AI for Replacing Subjective Analysis

of Seriplane test with Objective Analysis, Central Silk Bord – CSTRI, Sep 2024.

H. Guding Ph.D Students:

NIL

I. Award:

1. Received Award of Appreciation faculty for the Extraordinary Achievements of the year

2024 on Annual Get together Jan 26th 2025 from RSST.

J. Subjects Handled: Basic Electronics, Network Analysis, Principles of Electronics

Engineering, Wireless Mobile Networks

**K. Professional Membership:** NIL

No. of Projects guided to UG Students: 20

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No. of Projects guided to PG Students: 2

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