Kowsalya. G

Ph.D. MATHEMATICS

PROFILE

To build career in a reputed organization where I can use all my skills for the welfare of the organization and for personal growth through continuous learning.

CONTACT

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9715898773
ADDRESS:
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EMAIL:
Kowsimercy44@gmail.com

STRENGTHS

- Possess Positive attitude.
- Responsible towards work.
- Self-motivated and directed.
- Workaholics.

RESPONSIBILITIES

- Strong observational skills.
- Caring, friendly and outgoing nature
- Ability to relate with a wide variety of people.

SKILLS

- C, C++.
- LaTeX.
- MATLAB.

RESOURCE PERSON: Delivered a lecture as a resource person on the topic **"BASIC ARTICLE WRITING USING LATEX"**

EDUCATION

GOVERNMENT HIGHER SECONDARY SCHOOL, KOTAGIRI (2010)
10th passed from SSLC Board (70%)
GOVERNMENT HIGHER SECONDARY SCHOOL (2012)
12th passed from HSC Board (55%)
MICHAEL JOB COLLEGE FOR WOMEN (2012-15)
B.sc MATHEMATICS (7.2 CGPA)
KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES(2015-17)
M.sc MATHEMATICS (7.4 CGPA)
KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES(2018-22)
Ph.D. MATHEMATICS (Thesis Submitted)

PROJECT DETAILS

M.sc project: "MATHEMATICAL MODELLING OF HIV INFECTION USING FRACTIONAL ORDER DIFFERENTIAL EQUATION"

PhD Project Title: " MATHEMATICAL ANALYSIS OF SAMPLING AND RECOVERY OF 2D DATA FOR COMPRESSIVE SENSING APPLICATION"

PAPERS PUBLICATIONS

- Analysis of the Impact of Measurement Matrices in Compressive Sensing For Medical Images. *Advances in Mathematics: Scientific Journal,* 9(2 Special Issue), pp.591–600.

- Analysis of the Measurement Matrix in Directional Predictive Coding for Compressive Sensing of Medical Images. *ELCVIA. Electronic letters on computer vision and image analysis*, 20(2).

- Review on Deep Learning Methodologies in Medical Image Restoration and Segmentation. *Current Medical Imaging.*

- Development of Low Rank Sparse Matrix Decomposition for Improving Spatial and Temporal Resolutions of MRI Medical Data. In *2021*, **IEEE.**

- Mathematical analysis of stochastic distribution in compressive sensing of MRI images, *Expert Systems with Applications*. **(Communicated)**
- Research Gaps in Brain Image Segmentation: A Survey. *Current Medical Imaging.* **(Communicated)**
- Reconstruction of MRI images using compressive sensing based on deep learning, **neural computing and applications. (Communicated)**
- Sparse Modeling of Dictionary Learning in Compressive Sensing for Medical Images in *International Conference on computing sciences.* **(Communicated).**
- Generation of chain code picture language, *Journal of membrane computing.***(Communicated)**

PRESENTED IN INTERNATIONAL CONFERENCES

- Application of Stochastic Process in Highway Projects.

- Mathematical Modelling of HIV Infection Using Fractional Order Differential Equation.

- On The Benefits of Laplace Samples in Solving A Compressive Sensing Problem For Medical Images.

- Development of Low Rank Sparse Matrix Decomposition for Improving Spatial and Temporal Resolutions of MRI Medical Data.

- Sparse Modelling of Dictionary Learning In Compressive Sensing For Medical Images.

ONLINE COURSES/WORKSHOP

1. Workshop on **Machine learning, Deep learning Data science and artificial Intelligence** and **basics of documentation using Latex.**

2. Online value added course on **Recent applications of Mathematics in Engineering** and **Programming and type setting tools in Engineering.**

3. Online course on **Programming and type setting tools in Engineering.**

4. Online national workshop on **basics of documentation using Latex.**