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Scientific publications/Peer-reviewed publications:

1. **Gobburi Rekha,** V. Srinivas (2024). "Data Encryption and Decryption using Some Integral Transforms". *Advances in Nonlinear Variational Inequalities, Vol 27 No.2(2024)255-262.* **DOI:** https://doi.org/10.52783/anvi.v27.961.
2. **Gobburi Rekha,** V. Srinivas (2024). "Some Results of Data Encryption and Decryption using Euler's Totient Function". *Communications on Applied Nonlinear Analysis, Vol 31No.5s (2024)440-448.* **DOI:** https://doi.org/10.52783/cana.v31.1063.
3. **Gobburi Rekha,** V. Srinivas (2024) "Encryption and Decryption using Hill Cipher and Integral Transforms". *Communications on Applied Nonlinear Analysis, Vol 31No.6s (2024)143-152.* **DOI:** https://doi.org/10.52783/cana.v31.1173.
4. **Gobburi Rekha,** V. Srinivas (2023) "A Novel Approach in Hill Cipher Cryptography". *International Journal of Mathematics and Computer Research, Vol 11Issue 06 (2023)3503-3505.* **DOI:** https://doi.org/10.47191/ijmcr/v11i6.06.

Scientific Presentations:

1. **G.Rekha** "*Encryption and Decryption using RSA Algorithm with Mahgoub Integral Transform"* **International Conference** on Applications of Mathematics in Modern Science and Technology (**ICAMST-2026**), Organised by Anurag University-Hyderabad.

2. **G.Rekha** "*Data Encryption and Decryption using the Complete Graph*" **International Conference** on Advances in Mathematical Sciences and Their Technological Applications (**ICAMSTA-2025**)&XXXIV Congress of the Andhra Pradesh and Telangana Society for Mathematical Sciences (APTSMS),Organised by the Department of Mathematics-University College of Science, Osmania University-Hyderabad.3.

3. **G.Rekha** "*An Application of Eigen Values And Eigen Vectors in Cryptography"***National Conference** on Mathematics in the Modern World: Applications and Challenges (**NCMMWAC-2024**), Organised by the Department of Mathematics, Osmania University-Hyderabad**.**

4. **G.Rekha** *"Analysis on Hill Cipher by Prime Numbers"***International Conference** on Computational Modelling in Science and Engineering (**ICCMSE-2023**), Organised by the Department of Mathematics, National Institute of Technology-Warangal.

5. **G.Rekha** *"An application of Laplace-Kamal Transform for Cryptography"***International Conference** on Mathematical Modelling and Emerging Trends in Computing (**ICMMETC-2023**), Organised by School of Technology, Woxen University-Hyderabad.

Patents Published:

1. Dr.C.Silpa, Dr.VijayaKumar Sajjan,Dr.M.Linga Murthy, **Dr.G.Rekha** et al, *"Edge AI-Enabled Signal Processor For Low-Bandwidth Devices"* Indian Patent No.2025411214249 A, Published On 02.01.2026.

2. Dr.Jini Varghese P, **Dr. G.Rekha**,Dr.CH Soma Shekar et al, " *Method and System for Solving Nonlinear Equations using Advanced Numerical Methods"* Indian Patent No.202541126061 A, Published On 02.01.2026.