Dr. S. Kaliswaran
Assistant Professor, Department of Computer Science
Government Arts and Science College, Perumbakkam
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Objective

Research-oriented, dedicated, and reliable professional seeking a full-time Assistant Professor position at Annamalai University. Looking to utilize my teaching, research skills, and expertise in Environmental Geophysics to contribute to the growth of the Geophysics Department while advancing my career in academia.

Education

Ph.D. (Computer Application)

M.Phil. (Computer Science)

Master of Computer Science

B.Sc. (Physics)

Skills

- **Programming Languages**: C, C++, Java, Python, MATLAB
- **Cryptography Algorithms**: Elliptic Curve Cryptography, Diffie-Hellman, Hill Cipher
- **Optimization Algorithms**: Grey Wolf Optimization, Black Widow Optimization, Squirrel Search Optimization, Fruit Fly Optimization
- **Research & Analysis**: Image Encryption, High-Performance Computing, Secure Communication
- **Tools & Technologies**: FPGA, Generalized Feedback Shift Register (GFSR), S-Box
- **Soft Computing**: Immunological Computing, Adaptive Systems, Robust Systems

Publications

1. An Efficient Hybrid Optimization Algorithm with Elliptic-Curve Cryptography for Image Encryption
2. Elliptic Curve Diffie Hellman and Optimization Algorithm of a Pelican Optimization Algorithm
3. Image Encryption using Elliptic-Curve Cryptography with Act Colony Optimization Algorithm
4. War Optimization Method for Image Encryption Algorithm Based on A Chaotic Bit-Plane Decomposition
5. Securing Medical Images by Image Encryption Using Chaotic Key Sequence and Substitution Cipher
6. Image Encryption Using Generalized Feedback Shift Register, S-Box and Elliptic Curve Cryptosystem
7. Image Encryption Using a Combination of the Hill Cipher, Fibonacci Matrix, and Elliptic Curve Cryptography
8. FPGA Evolution: Harnessing Recent Trends and Algorithms for High-Performance Computing
9. Advancing Information Technology with Immunological Computing: Soft Computing Techniques for Adaptive and Robust Systems

International Conferences

1. Modified Grey Wolf Optimization-based Advanced Encryption Standard-based Cryptographic Technique for Digital Images
2. An Efficient Black Widow Optimization with Signcryption-based Image Encryption Technique
3. Hybridization of Squirrel Search Optimization and Fruit Fly Optimization Algorithm with Elliptic-Curve Cryptography for Image Encryption

Professional Experience

Assistant Professor
Department of Computer Science, Government Arts and Science College, Perumbakkam

- Delivered lectures on Computer Science, Cryptography, and High-Performance Computing.
- Guided students on research projects focused on image encryption and optimization algorithms.
- Conducted workshops on the application of Elliptic Curve Cryptography and FPGA-based algorithms.
- Engaged in various research initiatives, resulting in multiple publications in renowned journals and conferences.

Research Interests

- Environmental Geophysics
- Cryptography and Data Security
- Image Encryption Techniques
- Soft Computing Algorithms
- High-Performance Computing and FPGA-based Solutions

Personal Attributes

- Enthusiastic and self-motivated professional with excellent time management and organizational skills.
- Reliable, responsible, and adaptable to all challenging academic and research environments.
- Strong teamwork and leadership abilities, with an inclination towards fostering a collaborative research environment.
- Committed to continuous personal and professional growth in academia.

References

Available upon request.