A.M.GURUSIGAAMANI., M.Tech., Ph.D(Pursuing)

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Objective

As an assistant professor of Computer Science and Engineering, my goal is to contribute to advancing knowledge through innovative research and high-quality teaching. I aim to foster a collaborative learning environment that encourages critical thinking and creativity while mentoring the next generation of scholars.

Education

- **Pursuing Ph.D** in Computer Science and Engineering Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu
- **M.Tech** in Computer Science and Engineering Kalasalingam University, Krishnankoil, Tamilnadu [8.38 CGPA-May 2013]
- **B.Tech** in Computer Science and Engineering Kalasalingam University, Krishnankoil, Tamilnadu [7.62 CGPA-May 2011]
- **HSC** in Government Higher Secondary School Chatrapatti, Rajapalayam, Tamilnadu [77.25%-March 2007]
- **SSLC** in A.A.G.M High School, Sankarapandiapuram, Tamilnadu – [84.4%-April 2005]

Teaching Experience

• Assistant Professor

Kalasalingam Academy of Research and Education, Department of Computer Science and Engineering – 26.11.2021- till date

- Courses taught:
 - Problem Solving using Python
 - Machine Learning
 - Design and Analysis of Algorithms
 - Database Management Systems
 - IT Infrastructure Landscapes Overview
 - Deep Learning
 - Secured Computing

Supervised and mentored 140+ undergraduate students.

• Assistant Professor

Kalasalingam Institute of Technology, Department of Computer Science and Engineering – 10.07.2014-25.11.2021

o Courses taught:

Python Programming

Data Structures and Algorithms

Theory of Computation

Cryptography and Network Security

Mobile Computing and Mobile Applications

Environmental Science

Programming in C

Cyber Security

User Interface Design

Software Engineering

Object Oriented Analysis and Design

Supervised and mentored 120 + undergraduate students.

• Assistant Professor

Anand Institute of Higher Technology, Department of Information Technology-01.07.2013-09.07.2014

Courses taught:

Data Structures and Algorithms

Programming in C

Software Engineering

Digital Principles and System Design

Professional Affiliations

- Member, Association of Computing Machinery, 2024.
- Member, Institute of Electrical and Electronics Engineers, 2025.

Departmental Service

- Exam cell co-ordinator
- Timetable Co-ordinator
- Class Co-ordinator/Faculty Advisor

University Service

- University Placement Coordinator
- Admission-Convenor
- Tamil Mandram & Fine Arts Co-Ordinator
- Actively participated in NBA, NAAC, UGC, and IQAR Accreditation work
- Sports-In charge

PROGRAMMES ORGNAIZED

Seminars/Conference/Workshops/Short term Courses/Symposium/FDP/Events:

Programme	Dates	Responsibility
Two days Faculty Training Programme on "Python Programming for Physicist".	15.06.2023 & 16.06.2023	Resource Person KARE, KrishnanKoil.
Technical Event 'SQL KNIGHTS', a part of EUPHORIA 2024, Organized by KARE ACM STUDENT CHAPTER, ID: 170084 .	26.03.2024 & 27.03.2024	Faculty Coordinator KARE, KrishnanKoil.
Technical Event 'TECH QUEST - THE DIGITAL ODYSSEY ', Organized by KARE ACM STUDENT CHAPTER. ID: 170084 .	03.06.2024	Faculty Coordinator KARE, KrishnanKoil.
Technical Event 'SHEROES CODEATHON : Exclusively for women participants ', Organized by KARE ACM-W Student CHAPTER, ID: 180857 .	16.08.2024	Faculty Coordinator KARE, KrishnanKoil.
Technical Event 'PEER TO PEER LEARNING WORKSHOP: Concept to Prototype', Organized by KARE ACM-W Student CHAPTER.	04.09.2024	Faculty Coordinator KARE, KrishnanKoil.
Technical Event 'ALUMNI TALK on Cloud Computing SAAS Applications ', Organized by KARE ACM-W Student CHAPTER.	13.09.2024	Faculty Coordinator KARE, KrishnanKoil.
Technical Event 'Eminent Speaker Program on Brain Computer Interface 'Organized by KARE ACM-W Student CHAPTER.	19.09.2024	Faculty Coordinator KARE, KrishnanKoil.
Technical Event 'ONE CREDIT COURSE ON on Brain Computer Interface ', Organized by KARE ACM-W Student CHAPTER.	20.09.2024 & 21.09.2024	Faculty Coordinator KARE, KrishnanKoil.
	Two days Faculty Training Programme on "Python Programming for Physicist". Technical Event 'SQL KNIGHTS', a part of EUPHORIA 2024, Organized by KARE ACM STUDENT CHAPTER, ID: 170084. Technical Event 'TECH QUEST - THE DIGITAL ODYSSEY', Organized by KARE ACM STUDENT CHAPTER. ID: 170084. Technical Event 'SHEROES CODEATHON: Exclusively for women participants', Organized by KARE ACM-W Student CHAPTER, ID: 180857. Technical Event 'PEER TO PEER LEARNING WORKSHOP: Concept to Prototype', Organized by KARE ACM-W Student CHAPTER. Technical Event 'ALUMNI TALK on Cloud Computing SAAS Applications', Organized by KARE ACM-W Student CHAPTER. Technical Event 'Eminent Speaker Program on Brain Computer Interface' Organized by KARE ACM-W Student CHAPTER.	Two days Faculty Training Programme on "Python Programming for Physicist". Technical Event 'SQL KNIGHTS', a part of EUPHORIA 2024, Organized by KARE ACM STUDENT CHAPTER, ID: 170084. Technical Event 'TECH QUEST - THE DIGITAL ODYSSEY', Organized by KARE ACM STUDENT CHAPTER. ID: 170084. Technical Event 'SHEROES CODEATHON: Exclusively for women participants', Organized by KARE ACM-W Student CHAPTER, ID: 180857. Technical Event 'PEER TO PEER LEARNING WORKSHOP: Concept to Prototype', Organized by KARE ACM-W Student CHAPTER. Technical Event 'ALUMNI TALK on Cloud Computing SAAS Applications', Organized by KARE ACM-W Student CHAPTER. Technical Event 'Eminent Speaker Program on Brain Computer Interface', Organized by KARE ACM-W Student CHAPTER. Technical Event 'ONE CREDIT COURSE ON on Brain Computer Interface', Organized by 20.09.2024 & 20.09.2024

9	"Technical Outreach programme for Govt. School Students at GOVT. School, Sundarapandiam', Organized by KARE ACM-W Student CHAPTER.	05.12.2024	Faculty Coordinator KARE, KrishnanKoil.
10	Technical Event 'Hour of Code', Organized by KARE ACM STUDENTS CHAPTER, ID: 170084.	26.01.2025	Faculty Member KARE, KrishnanKoil.
11	Technical Event: SHE-CODES APP DEVELOPMENT, a part of Vinthra 2024, Organized by KARE ACM-W Student CHAPTER, ID: 180857)	19.10.2024	Faculty Coordinator KARE, KrishnanKoil.
12	"Industry Colloquium on AI & Industry driven Approaches", Organized by KARE ACM MADURAI PROFESSIONAL CHAPTER, ID: 194839.	27.12.2024	Faculty Member KARE, KrishnanKoil.
13	Technical Event "Techathon'25": 24 hours Hackathon, Organized by KARE ACM-W Student CHAPTER, ID: 180857)	22.02.2025 & 23.02.2025	Faculty Coordinator KARE, KrishnanKoil.
14	ROCS, Jointly Organized by KARE ACM.	08.03.2025	Faculty Member KARE, KrishnanKoil.
15	"Industry Colloquium on AI & Industry driven Approaches", Organized by KARE ACM MADURAI PROFESSIONAL CHAPTER, ID: 194839.	27.12.2024	Faculty Member KARE, KrishnanKoil.
16	Technical Event "Techathon'25": 24 hours Hackathon, Organized by KARE ACM-W Student CHAPTER, ID: 180857)	22.02.2025 & 23.02.2025	Faculty Coordinator KARE, KrishnanKoil.
17	ROCS, Jointly Organized by KARE ACM.	08.03.2025	Faculty Member KARE, KrishnanKoil.
18	A Mass anti-drug pledge – "Drug Free Tamil Nadu"	11.08.2025	Faculty Member, Anti-Drug Cell, KARE, Krishnankoil
19	Drug Awareness Programme	29.08.2025	Faculty Member, Anti-Drug Cell, KARE, Krishnankoil

Workshops and FDPs

- Attended the FDP on "Fine-Tuning Presentations" held on 30th June 2015.
- Attended the workshop on "Ethical Hacking" held on 14th Aug 2015.
- Attended the FDP on "My Self Development & Transformation" held on 22nd Aug 2015.
 - on 23rd to 30th Nov 2015.
- Attended the Anna University FDP on "Digital Image Processing" held on 6th to 13th June 2016.
- Attended the FEP on "Achieve the Target" held on 5th Nov 2016.
- Attended the FDP on "Flipped Class Room" held on 2nd Nov 2016.
- Attended the FDP on "Research Methodologies & LaTeX" held on 15th Dec 2016 to 17th Dec 2016.
- Attended the FDP on "Google Class Room & Flipped Class room" held on 28th Jan 2017.
- Attended the workshop on "Advanced Teaching Methodologies" held on 10th Mar 2017.
- Attended the workshop on "The Art of Writing Winning Project Proposal for Funding" held on 7th Oct 2017.
- Attended the training on "Insights of NBA Accreditation-CO/PO Attainment
- Calculation" held on 20th June 2017
- Attended the Anna University FDP on "Cyber Forensics" held on 27th Nov to 3rd Dec 2017.
- Attended the FDP on "Artificial Intelligence" held on 22nd May to 26th May 2020
- Attended the Webinar on "Overcoming Challenges in taking online class" held on 2nd June, 2020.
- Attended the Webinar on "Python a Game Changer in Disruptive Technologies" held on 18th July, 2020.
- Attended the Orientation on "Engineering Education" held on 19th Jan to 23rd Jan 2021.
- Attended the ATAL FDP on "Industrial Internet of Things" held from 7th Jun to 11th Jun 2021.
- Attended the ATAL FDP on "Human Factors in Software Design" held from 21st
- Jun to 25th Jun 2021.
- Attended the FDP on "IoT & Applications(Smart Systems)" held from 14th Feb to 25th Feb 2022.
- Attended the FDP on "Signal & Image processing techniques for next generation
- applications" held from 4th Mar to 13th Mar 2022.
- Attended the FDP on "Amazon Web services" held from 22nd Aug to 27th Aug, 2022.
- Attended the FDP on "Artificial Intelligence" held from 05th Dec to 09th Dec 2022.
- Attended the Workshop on "Block Chain Technology and its tools" held on 18th & 19 th Feb,2023.

• Attended the Webinar on "Emerging Trends in Computer Science and Technology" held from 20th Feb to 24th Feb,2023.

Conferences/Journals/Book chapters:

- C. K. N, V. Kansal, **G. A. Muthulingam**, M. S, A. Verma and M. E. M. Soudagar, "IoT Based Health Monitoring System Using Optimized Hybrid Quantum-Classical Generative Adversarial Networks," 2025 3rd International Conference on Inventive Computing and Informatics (ICICI), Bangalore, India, 2025, pp. 1708-1713, doi: 10.1109/ICICI65870.2025.11069759.
- **G. A. Muthulingam,** K. Ponnuchamy, S. Praveen, S. Fayaz, S. A. Reddy and S. Vikram, "A Comprehensive Study of Sleep Disorder Classification using XGBoost Algorithm," 2025 5th International Conference on Pervasive Computing and Social Networking (ICPCSN), Salem, India, 2025, pp. 298-302, doi: 10.1109/ICPCSN65854.2025.11035890.
- **G. A. Muthulingam,** S. P. Chandu, P.Meghana, P. K. Yadav and R. T. Kumar, "Classification of Astrocytoma using MLP and LSTM," *2025 5th International Conference on Pervasive Computing and Social Networking (ICPCSN)*, Salem, India, 2025, pp. 155-160, doi: 10.1109/ICPCSN65854.2025.11035592.
- **G. A. Muthulingam** and V. S. Parvathy, "Optimizing Brain Tumor Classification with GridSearchCV Using Multimodal Image Fusion: A Hyperparameter Tuning Approach," *2025 International Conference on Inventive Computation Technologies (ICICT)*, Kirtipur, Nepal, 2025, pp. 682-689, doi: 10.1109/ICICT64420.2025.11004891.
- **G. A. Muthulingam,** K. Ponnuchamy, G. P. Kumar, J. Mahesh, G. N. H. B. Karthik and J. V. Krishna, "A Comparative Analysis Between Support Vector Machine and Linear Regression for Improving Accuracy of Medal Tally in Asian Games," *2025 International Conference on Multi-Agent Systems for Collaborative Intelligence (ICMSCI)*, Erode, India, 2025, pp. 1614-1618, doi: 10.1109/ICMSCI62561.2025.10894454.
- N. P, M. S. K, **A. M. Gurusigaamani**, B. S. Vasanth, V. S. S. Saranya and P. G. K. Reddy, "Traffic Detection and Enhancing Traffic Safety: YOLO V8 Framework and OCR for Violation Detection Using Deep Learning Techniques," *2024 International Conference on Science Technology Engineering and Management (ICSTEM*), Coimbatore, India, 2024, pp. 1-6, doi: 10.1109/ICSTEM61137.2024.10560904.
- **G. A. Muthulingam,** G. Dhasmana, S. Purushothaman, S. Honnaiah, B. Ronald and M. E. M. Soudagar, "Advanced IoT Intrusion Detection for Intelligent Homes using Optimized Cross-Contextual Transformers with a Dynamic City Game Framework," 2024 8th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Kirtipur, Nepal, 2024, pp. 130-136, doi: 10.1109/I-SMAC61858.2024.10714891.
- R. Dhumpati, V. Kansal, **G. A. Muthulingam,** A. K. S. Pundir, H. Patil and R. Maranan, "Efficient Detection of Multiple Lung Diseases from Chest CT Scans and Coughs Sound using a Simplicial Attention-based Sparse Graph Convolutional Network," *2024 8th*

- International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Kirtipur, Nepal, 2024, pp. 1312-1318, doi: 10.1109/I-SMAC61858.2024.10714875.
- N. P, **A. M. Gurusigaamani,** A. A. Khan, S. S, R. M and A. Mohiuddin, "EMOWELL: Emotional Well-Being Web Application for Better Understanding Using NLP Techniques," 2024 5th International Conference on Electronics and Sustainable Communication Systems (ICESC), Coimbatore, India, 2024, pp. 861-865, doi: 10.1109/ICESC60852.2024.10689904.
- P. Nagaraj, R. D. Babu, T. Marimuthu, S. S. Saloni, **A. M. Gurusigaamani** and T. S. Kiran K, "Categorical Prediction and Design Implementation for Triple Marker Test Using Clustering Algorithms and Validations," *2024 IEEE 3rd World Conference on Applied Intelligence and Computing (AIC)*, Gwalior, India, 2024, pp. 310-317, doi: 10.1109/AIC61668.2024.10777894.
- S.P. Velmurugan, **A.M. Gurusigaamani**, P. Vigneshwaran, V. Suresh Babu, Jenyfal Sampson, Chapter 5 Enhanced Galactic Swarm Algorithm with Encryption Technique for Medical Image Security in Internet of Things environment, Editor(s): Deepak Gupta, Aboul Ella Hassanien, Securing Next-Generation Connected Healthcare Systems, Academic Press, 2024, Pages 103-122,ISBN 9780443139512, https://doi.org/10.1016/B978-0-443-13951-2.00008-8.
- R. Marimuthu, **G. A. Muthulingam,** V. N. A. S, S. Ganesan and K. Ponnuchamy, "Twitter Spam Detection Using Word Vector and Binary Classifier," *2023 International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS)*, Erode, India, 2023, pp. 972-979, doi: 10.1109/ICSSAS57918.2023.10331861.
- **Muthulingam, G. A.,** & Parvathy, V. S. (2023). A Novel Bacterial Foraging Optimization Based Multimodal Medical Image Fusion Approach. *Applied Science and Engineering Progress*, 16(4), 6794. https://doi.org/10.14416/j.asep.2023.03.004

Books:

- Dr. Vinoth N.A.S., Mrs. Ramaprabha M., Dr. Velmurugan S.P., Mrs. **Gurusigaamani A.M.**, "FUNDAMENTALS OF IOT AND BIG DATA," SCIENTIFIC INTERNATIONAL PUBLISHING HOUSE, 978-93-5757-810-3.
- Dr. Rekha V., Dr. Swathi H Y, M., Mrs. **Gurusigaamani, A.M**., Dr. Prasannaanjaneyulu A N K, "AI IN CLOUD," SCIENTIFIC INTERNATIONAL PUBLISHING HOUSE, 978-93-6674-442-1.