**FACULTY PROFILE**

Name : Dr. RAMESH. K

Designation : Assistant Professor (Sr. Grade) and Head

Department : Department of Computer Applications

Mail Id : [rameshk7n@yahoo.co.in](mailto:rameshk7n@yahoo.co.in), [ramesh.k@auttvl.ac.in](mailto:ramesh.k@auttvl.ac.in)

Education Qualification :

|  |  |  |  |
| --- | --- | --- | --- |
| **Degree** | **Specialization** | **University** | **Awarded Year** |
| **B.Sc.,** | **Mathematics** | Manonmaniam Sundaranar University | 1998 |
| **MCA** | Computer Applications | Manonmaniam Sundaranar University | 2001 |
| **B.Ed**., | Mathematics | IGNOU | 2007 |
| **M.Phil**. | Computer Science | Periyar University | 2008 |
| **PhD** | Data Mining | Anna University | 2014 |

Professional Experience:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the Company / Institutions** | **Designation** | **Duration** | | **Experience in Years** |
| **From** | **To** |
| Muthayammal Engg. College, Rasipuram, Namakkal | Lecturer | May 2002 | Jan 2009 | 8yrs 9 months |
| Anna University, Tirunelveli | Teaching Research Associate | Feb 2009 | Aug 2010 | 1yr 6 months |
| Anna University | Assistant Professor | Aug 2010 | Till date |  |

**Area of Specialization:** Forecasting, time-series analysis, Big Data Analytics, Image Processing

**Academic Responsibilities:**

1. Faculty in charge : Campus Dispensary 21.03.2016 to 02.07.2019
2. Faculty in charge : Dean Office 28.04.2017 to 01.06.2019
3. Health Centre Coordinator : 03.07.2019 to 04.11.2020

**Committee Member:** (Representation in any Committee) :

1. Board of Studies – Subject Expert, Sarah Tucker College (Autonomous), Tirunelveli.

**Professional Membership:** Life Member of Computer Society of India

Research Guidance

1. PG : 61
2. Ph.D: Guided : 3 Ongoing : 7

**PhD Completed: 3**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Name of the Scholar** | **Title** | **Date of Completion** |
| **1** | **Dr. S Shirly** | Automated diagnosis of disc bulge and disc desiccation from lumbar MRI using concatenated shape and texture features | **04.06.2020** |
| **2.** | **Dr. V. Sri Vigna Hema** | Augmentation of Data Security using Obfuscation and Elliptic Curve Cryptography Algorithm in Health Cloud | **05.06.2020** |
| **3** | **Dr. M. Misba** | Determination Of Urban Heat Island By Computing Land Use And Land Cover And Land Surface Temperature From Satellite Image Using Machine Learning Technique For Chennai | **23.12.2022** |

PhD Pursuing : 7

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Name of the Scholar** | **Research Area** | **Status** |
|  | Ms. Vegi Fernando A | Text Analysis | Thesis Submitted |
|  | Ms. Arogya Presskila X | Cloud Security | Thesis Submitted |
|  | Mrs. George Klington A | Image Processing | Thesis Submitted |
|  | Saranya R B | Big Data Analytics | Progress |
|  | Jabin Prakash J | Cloud deduplication | Progress |
|  | Vijaya Baskar B S | Data Analytics | Progress |
|  | Saravanan T | Work flow analytics in cloud | Progress |

Publications (National/International): 18

1. Saranya R., **Ramesh K**., Nisha Devi, K. (2022). Extremely Randomized Tree Based Sentiment Polarity Classification on Online Product Reviews. In: Roy, P.P., Agarwal, A., Li, T., Krishna Reddy, P., Uday Kiran, R. (eds) Big Data Analytics. BDA 2022. Lecture Notes in Computer Science, vol 13773. Springer, Cham. https://doi.org/10.1007/978-3-031-24094-2\_11
2. Sri Vigna Hema.V, **Ramesh K**, (2022), Augmented security for healthcare data using obfuscation and elliptic curve cryptography algorithm in health cloud environment, CONCURRENCY AND COMPUTATION-PRACTICE & EXPERIENCE, DOI: [10.1002/cpe.7275](http://dx.doi.org/10.1002/cpe.7275)
3. Xiujun Zhai, Rajaram A, **Ramesh K**, (2022). Cognitive Model for Human Behavior Analysis, **Journal of Interconnection Networks**, <https://doi.org/10.1142/S0219265921460130>
4. Vegi A. Fernando, **Ramesh K**, (2022) Deep-Learned Bi-GRU-LSTM Model (DL-BGLM): A New Framework for Text-based Fake News Detection, NeuroQuantology 20(5), 3599-3609, doi: 10.14704/nq.2022.20.5.NQ22658
5. Arogya Presskila X, **Ramesh K**, (2022). Hybrid Elliptic Curve Cryptographic Approach for Data Privacy and Authentication in Secured Map Reduce Layer (SMR) for Optimized CPU Utilization. **IETE Journal of Research**, <https://doi.org/10.1080/03772063.2022.2027285>
6. George Klington, A., **Ramesh, K**., Kadry, S. (2021). Cost-Effective Watermarking Scheme for Authentication of Digital Fundus Images in Healthcare Data Management. **Information Technology and Control**, 50(4), 645-655. <https://doi.org/10.5755/j01.itc.50.4.28957> (Impact factor:1.56)
7. Fenghua Qi, Yongqing Chang, **Ramesh K**, Hemalatha P, 2021, Online and offline teaching connection system of college ideological and political education based on deep learning. **Progress in Artificial Intelligence**. <https://doi.org/10.1007/s13748-021-00268-w> (Impact factor:2.25)
8. **Ramesh K**, Misba M, Karuppasamy S, Shirly S, Saravanan K, 2021, ARIMA modeling for forecasting land surface temperature and determination of urban heat island using remote sensing techniques for Chennai city, India, **Arabian Journal of Geosciences**, vol. 14:1016, <https://doi.org/10.1007/s12517-021-07351-5> (Impact factor:1.985)
9. Shirly, S and **Ramesh, K**, 2019, Diagnosis of disc bulge and disc desiccation in lumbar MRI using concatenated shape and texture features with random forest classifier, **International Journal of Imaging Systems and Technology**, vol. 30**, Issue 2** https://doi.org/10.1002/ima.22374. (Impact factor:1.254)

# Sri Vigna Hema.V, Ramesh K, 2019, ECC Based Secure Sharing of Healthcare Data in the Health Cloud Environment, Wireless Personal Communications, https://doi.org/10.1007/s11277-019-06450-7. (Impact Factor:1.2)

# Shirly S & Ramesh K, 2019, Review on 2D and 3D MRI Image Segmentation Techniques, Current Medical Image Review, vol. 13, DOI: 10.2174/1573405613666171123160609 (Impact Factor:0.3)

1. **Ramesh, K**, Anitha, R and Ramalakshmi, P, 2015, Prediction of Lead Seven Day Minimum and Maximum Surface Air Temperature using Neural Network and Genetic Programming, **Sains Malaysiana**, vol. 44, no 10, pp. 1389–1396. (Impact Factor: 0.45)
2. Shenbaga Vinayaga Moorthi, N, Arul Franco, P and **Ramesh, K**, 2015, Application of design of experiments and artificial neural network in optimization of ultrasonic energy assisted transesterification of Sardinella longiceps fish oil to biodiesel, **Journal of the Chinese Institute of Engineers**, DOI: 10.1080/02533839.2015.1027740 (Impact Factor: 0.24)
3. **Ramesh, K,** Kesarkar, AP, .Bhate, J, Venkat Ratnam, M & Jayaraman, A 2015, Adaptive neuro-fuzzy inference system for temperature and humidity profile retrieval from microwave radiometer observations, **Atmospheric Measurement Techniques**, vol. 8, pp. 369-384, doi:10.5194/amt-8-369-2015. (Impact Factor: 3.36)
4. **Ramesh, K,** Kesarkar, AP, Bhate, J, Venkat Ratnam, M & Jayaraman, A 2014, ‘Adaptive neuro fuzzy inference system for profiling of the atmosphere’, **Atmospheric Measurement Techniques Discussion**, vol. 7, pp. 2715-2736. Doi: 10.5194/amtd.
5. **Ramesh, K** & Anitha, R 2014, ‘MARSpline model for lead seven day maximum and minimum air temperature prediction in Chennai, India’, **Journal of Earth System Science**, vol. 123, no. 4, pp. 665-672. (Impact Factor: 1.04)
6. **Ramesh, K,** Anitha, R & Selvagopal, P 2014,‘Linear Regression based lead seven day maximum and minimum air temperature prediction in Chennai, India.’, **Research Journal of Applied Sciences, Engineering and Technology**, vol. 7, no. 11, pp. 2306-2310.
7. **Ramesh, K**, Anitha, R & Senthil Kumar, M 2014, ‘Lead seven day maximum and minimum air temperature prediction: Comparative study with linear and polynomial regression’, **Australian Journal of basic and applied sciences**, vol. 8, no. 1, pp. 442-447.

Conferences (National/International) : 19

1. NishaDevi K, **Ramesh K** 2023, Study on the Policy Response and its Impact During COVID Pandemic in India, International Conference on Artificial Intelligence and Block Chain (ICAIBC -2023) Bannari Ammn Institute of Technology- Erode on 5th and 6th Jan 2023.
2. Vegi Fernando A & **Ramesh K** 2018, Review on Indexing Methodologies for Microblogs, International Conference on Applied Soft Computing Techniques (ICASCT’ 18), Kalasalingam Academy of Research and Education, Krishnankoil on 23rd and 24th of March 2018.
3. Pushpa Jaculine J & **Ramesh K** 2018, IoT Based Smart Water Distribution System, International Conference on Applied Soft Computing Techniques (ICASCT’ 18), Kalasalingam Academy of Research and Education, Krishnankoil on 23rd and 24th of March 2018.
4. Shirly S & **Ramesh K** 2017, Review on Deep Learning Algorithm in Medical Image Analysis, International Conference on Intelligent Computing Techniques, Sarah Tucker College, Tirunelveli on 1st September 2017.
5. Pushpa Jaculine J & **Ramesh K** 2017, A Survey on Internet of Things Based Smart Water Management, International Conference on Intelligent Computing Techniques, Sarah Tucker College, Tirunelveli on 1st September 2017.
6. Kokila R, **Ramesh K** & R B Saranya 2017, Impact of Big Data Analytics on Business Intelligence and E-Commerce, National Conference on Computational Methods, Communication Techniques and Informatics, Gandhigram Rural Institute-Deemed University.
7. Karthigarajeswari E & **Ramesh K**, 2017 A Survey on Reference Architecture and Classification of Social Media Big Data Systems, National Conference on Computational Methods, Communication Techniques and Informatics, Gandhigram Rural Institute-Deemed University.
8. Sri Vigna Hema V & **Ramesh K,** 2016, CCAF-MLDS: Accomplishing Multi-Layered Data Security in the Data Center using Cloud Computing Adoption Framework, 12th National Conference on High Performance Computing, CSE, Government College of Engineering, Tirunelveli.
9. Arogya Presskila X, **Ramesh K,** Paul Steven S, 2016, The Explosion of Big Data and Processing based on I/O Bounded Disk-based Systems, International Conference on Technical Innovations in Electrical, Electronics, Computer, and Communication, PET Engineering College, Tirunelveli.
10. Dharani R, Vinolia Anandan, **Ramesh K,** 2015, Intelligent Screening System for Cervical Cancer using Multiple Adaptive Neuro Fuzzy Inference System, National Conference VISION’15, CSE, Government college of Engineering, Tirunelveli.
11. Arun Karthikeyan, B & **Ramesh, K** 2014, ‘ Monitoring of Object and Authenticating Using Android Smart Phones’ in International Conference on Emerging Marvels in Information and Computer Science and Engineering at Maria College of Engineering and Technology, Nagercoil.
12. Ajey Vignesh T, R & **Ramesh, K** 2014, ‘Source Anonymous Message authentication on Mobile Ad Hoc Network,’ in International Conference on Emerging Marvels in Information and Computer Science and Engineering at Maria College of Engineering and Technology, Nagercoil.
13. Ajey Vignesh T, R & **Ramesh, K** 2014, ‘Anonymous Message authentication on Mobile Ad Hoc Network’ in International Conference on Innovative Engineering Skills at Aishwarya College of Engineering and Technology, Erode.
14. Arun Karthikeyan, B & **Ramesh, K** 2014, ‘ A Novel Approach for Tracking Real Time Authenticated Object Using Android Smart Phones’ in International Conference on Innovative Engineering Skills at Aishwarya College of Engineering and Technology, Erode.
15. **Ramesh, K**, Anitha, R & Sweetly Blessinta, M 2013, 'Satellite Image Spatial Database Creation Using Object Recognition Scheme', National Conference on Advances in computing Analysis & Applications, Proceeding of ACAA'13.
16. **Ramesh, K**, Anitha, R & Ramalakshmi, P 2013, 'regression Based Short Term Temperature Forecasting', National Conference on Advances in computing Analysis & Applications, Proceeding of ACAA'13.
17. Sankaran M, Jesu Vedha Nayahi J, Sahaya Arul J, **Ramesh K** & Manoj, 2012, in the proceeding of Third International Conference on Communication Computation Control and Automation at Sri RamaKrishna Institute of Technology, Coimbatore
18. **Ramesh, K,** Deenadayalan, T, Suresh, P & Anitha, R 2009, ' Choice Relation Based Data Cleaning in Database', National Conference on emerging trends in engineering and technology.
19. **Ramesh, K**, & Anitha, R 2009, ' Proposal for usage of web mining framework for user interest in the dynamic web database', National Conference on emerging trends in engineering and technology.

Book / Chapter:

* Authored a chapter entitled “Smart IoT Meters for Smart Living “ in the book *“*Handbook of Research on Implementation and Deployment of IoT Projects in Smart Cities”, DOI: 10.4018/978-1-5225-9199-3
* Editor of Book entitled “ Handbook of Artificial Intelligence in Biomedical Engineering” , Apple Academic Press.
* Authored a chapter entitled “An Exploratory Study of Disaster Risk Management Mobile Applications in Pandemic Periods”. In the book “Understanding COVID-19: The Role of Computational Intelligence”. vol 963. Springer. https://doi.org/10.1007/978-3-030-74761-9\_9

Expert Lecture Delivered:

1. “Introduction to Data Analytics” on 27/09/2021 at PET Engineering College, Vallioor.
2. “Text Analytics” on 01/10/2021 at PET Engineering College, Vallioor.
3. “ Sentiment Analysis“ on 22/07/2020 at Annai Hajira Women’s College, Tirunelveli.
4. “Personal and Institutional Development in Teachers Profession” on 19/12/2019 at The Indian Agriculture College, Radhapuram.
5. “Data Analytics- Sentiment Analysis” on 31/08/2017 at Sunflower College of Engineering and Technology, Lankapalli, AndraPradesh.

Short Term Courses, Seminars, Workshop

Organized :

1. Seminar on “Importance of Free Open Source Software (FOSS)” Association with IIT – Bombay on 22 October 2013
2. Two-week ISTE workshop on "Computer Networking" Conducted by IIT- Bombay from May 28th, 2014 to July 5th, 2014
3. Two days workshop on Big Data & Hadoop At Anna University Regional Campus - Tirunelveli on 11th and 12th of February 2016.
4. National level workshop on Simulating Research Perspective on Big Data NLWSRPBD’ 18, Feb 2018
5. National level Symposium on Perceptive Technical Wizard 2019 NLSPTW’ 19, 25th January 2019

Attended :

1. Seminar on Fuzzy image processing(2007) organized by Kongu Engineering College, Erode during 26/1/2007 and 27/01/2007 (2 days)
2. One day research workshop on Data mining using memtic algorithms(2008) organized by Periyar University on 08/11/2008 (1 day)
3. Two day workshop on Soft Computing - new trends, Research issues and applications (2009) organized by Anna University Tirunelveli during 2009 (2 days)
4. National level workshop on "Research in computer science Issues and Challenges" (2010) organized by K.S.Rangasamy College of Technology during 17/04/2010 (1 day)
5. Two day workshop on "Research methodologies in Computer Science and Engineering" (2011) organized by Anna University on 24th & 25th of September 2011 (2 days)
6. One day faculty development and training program on " Free Open Source Software (FOSS)" (2013) organized by GNU/Linux user group of Sethu Institute of Technology in association with Spoken Tutorial Team Of IIT Bombay on 03/09/2013 (1 day)
7. Two day ISTE workshop on Aakash for Education (2012) conducted by IIT Bombay during 10th and 11th of November 2012 ( 2 days)
8. "NPTEL Workshop" (2013) organized by National Programme on Technology Enhanced Learning (IIT Madras) on 20th April 2013. (1 day)
9. Two week ISTE workshop on "Database Management Systems " (2013) conducted by IIT Bombay during 21st and 31st of May 2013 (2 weeks)
10. SAARC Seminar on high impact weather events and their prediction over the SAARC region (2013) organized by India Meteorological Department, Delhi during 2nd to 4th of December 2013. (3 days)
11. Two week ISTE workshop on "Computer Programming" (2014) conducted by IIT Bombay during 20th May 2014 to 21st of June 2014 (2 weeks)
12. Coordinators' workshop for ISTE workshop on Computer Networking (2014) from 05th May 2014 - 10th May 2014 at IIT Bombay. (6 days)
13. Two week ISTE STTP workshop on " Introduction to Design of Algorithms” (2015) conducted by IIT Kharagpur during 2th April 2015 to 30th of May 2015 (2 weeks)
14. Train the Trainers programme on “ Employability Skill Enhancement for Engineering Graduates” (2017) conducted by CUIC, Anna University, Chennai and Titan Company Limited during 18th January 2017 & 19th January 2017 (2 days)
15. Hands-on workshop on python programming (2017) organized by Centre for Academic Courses, Anna University, Chennai during 21st & 22nd August 2017. (2 days)
16. Two week AICTE approved FDP on " Foundation Program in ICT for Education” (2017) conducted by IIT Bombay during 3rd August 2017 to 07th of September 2017 (2 weeks)
17. Two week AICTE approved FDP on " Pedagogy for Online Blended Teaching Learning Process” (2017) conducted by IIT Bombay during 14th September 2017 to 12th of October 2017 (2 weeks)
18. One day National level Workshop on Open Geospatial Consortium (2018) organized by Anna University Regional Campus, Tirunelveli on 7th of March 2018. (1 day)
19. Off – Campus Outreach Certificate Programme on “ Advanced Image Analysis” (2018) Conducted by Indian Institute of Remote Sensing during 4th June 2018 to 18th June 2018 (2 weeks)
20. Two week FDP on " Entrepreneurship” Sponsored by NSTEDB in association with EDII- Ahmedabad during 22nd October 2018 to 04th November 2018