

# Profile

## Dr.K. Geetha

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### Academic Qualifications

- **Ph.D.** in Information and Communication Engineering, Anna University, Chennai, 2016 *Thesis: Feature Selection of Multimodal Biometrics using Hybrid Cuckoo Search and its application in wireless network security*
- **M.E.** in Information Technology, VMKV Engineering College, Vinayaga Mission University, Salem, 2007.
- **B.E.** in Computer Science and Engineering, Bharathidasan University, Trichy, 2000

### Research Interests

- Soft Computing
- Artificial Intelligence and Machine learning
- Image processing
- Biometrics
- Sensor Networks
- Data mining

### Professional Experience

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#### *Over 23 years of Teaching Experience*

**Professor** M.A.M. College of Engineering and Technology, Trichy (June 2020 to till date)

**Associate professor and Professor**, MIET Engineering College, Trichy (Jan 2012 – March 2020)

**Assistant Professor**, Mookambigai College of Engineering, Trichy (Jan 2001-Jan 2012)

### Publications

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- Virtual Healthcare Navigator International Journal of New Innovations in Engineering and Technology Volume 24 Issue 1 ISSN 2319-6319I March 2024
- Bank challan form autofill machine International Journal of Creative Research Thoughts Volume 12, Issue 4 April 2024 | ISSN: 2320-2882
- CNN Approaches to fingerprint and vein authentication systems International Journal of All Research Education and Scientific Methods. ISSN: 2455-6211, Volume 12, Issue 5, May-2024
- Augmenting of corrupted Image from CCTV footage, International Journal of Creative Research Thoughts ISSN: 2320-2882, Volume11, Issue5, May 2023
- Pattern recognition for Identifying Marine animals, International Journal of Research Publication and Reviews 2582-7421 Volume 4, Issue5, May 2023

- Application for E-commerce resource scheduler International Journal of Research Publication and Reviews Volume 4, Issue 5 May 2023
- Security enhanced commercial services using block chain technology, JSR, Volume 12 Issue 4 ISSN NO: 1781-7838, April 2020
- An evolutionary lion optimization algorithm-based image compression technique for biomedical applications Expert System, 2020 Wiley Publication <https://doi.org/10.1111/exsy.12508>
- A novel Shape Feature Extraction technique for Content Based Image Retrieval (CBIR) Systems, International Journal of Advanced Science & Technology Volume 28 No2 158-169, 27<sup>th</sup> Dec 2019, <http://sersc.org/journals/index.php/IJAST/article/view/474>
- Securing Patient Data in Wireless Body Area Sensor Network Using Biometrics Based Key Generation Current medical imaging reviews. Volume 13, Issue 3, 2017. DOI: 10.2174/1573405613666161121121115 Optimization of SVM parameters and feature selection using gravitational search algorithm in Institute of Integrative Omics and Applied Biotechnology (IIOAB) - ISSN: 0976-3104.
- Optimization of SVM parameters and feature selection using gravitational search algorithm in Institute of Integrative Omics and Applied Biotechnology (IIOAB) - ISSN: 0976-3104.
- Diversity based internet access in vehicular network in IJARTET in Volume 3 March 2016.ISSN 2394-3785
- Multimodal Biometric System: A Feature Level Fusion Approach in International Journal of Computer Application (IJCA), June 2013 Edition.
- Multimodal Biometrics against spoofing attacks in International Journal SSRG(Seventh Sense Research group)
- 3D Depth and severity analysis of skin lesion using content aware scaling method in International journal SSRG(Seventh Sense Research group)

#### **INTERNATIONAL CONFERENCE**

- Virtual Healthcare Navigator 8<sup>th</sup> International Conference on Engineering Technology & Science, Muthayammal College of Engineering, Rasipuram 2024
- Automated Challan filling machine 2<sup>nd</sup> International Conference on Innovative Trends in Engineering and Sciences, Bannari Amman Institute of Technology- Sathyamanagalam, 2024.
- Finger print and vein security system using CNN algorithm, 5<sup>th</sup> International Conference on Recent Innovations in Engineering and Technology. Society for Aero space and Mechanical Professionals & Society for Information, Communication & Electrical Engineers 2024.

- Geospatial data exploration using machine learning in ICOSEC-2023 4th International Conference on smart electronics and communication Organized by Kongunadu College of Engineering and Technology, Trichy-Tamilnadu India.
- Augmenting of corrupted image for CCTV footage, Third International Conference on AI, 5G communications & Network Technologies, Vellammal Institute of Tech, Chennai. March 2023.
- Pattern recognition for Identifying Marine animals, National Conference on Emerging trends in Engineering Science & Technology, Hindusthan Institute of Tech, Coimbatore. April 2023.,
- “A nonlinear model for mouse pointing task movement time analysis based on both human and system effects” in Ranganathan Engineering College, Coimbatore 30-31<sup>st</sup> March 2018.
- Multimodal Biometrics against spoofing attacks in emerging trends and Science & Humanities on 30th march 2015 in Imayam College of Engineering
- 3D Depth and severity analysis of skin lesion using content aware scaling method- International conference on emerging trends and Science & Humanities on 30th march 2015 in Imayam College of Engineering
- New Efficient Technique for Text Search in Sri Subramanya College of Engineering and Technology 13-14 March 2014.
- “Secure Data Transfer In Wireless Networks By Detecting IP Spoofing Attacks” in Thiruvalluvar College of Engineering And Technology 1<sup>st</sup> March 2014
- “A Decision Tree Based Approach For Protecting Privacy Using Artificial Datasets in Pavai Engineering College on 2<sup>nd</sup> March 2014.
- “Incremental Information Extraction Using JSON Database”, (Inter National Conference on RADAR, Communication and Computing ICRCC-12), SKP Engineering College 21<sup>st</sup> -22<sup>nd</sup> December 2012.

#### **NATIONAL CONFERENCE**

- Secure Balloting machine using finger print with Aadhar verification on 23<sup>rd</sup> March 2018 ST. Joseph’s College of Engineering and Technology, Thanjavur.
- Disease production based on retinal images using deep neural networks on 24<sup>th</sup> march 2018 at Dhanalakshmi Srinivasan Engineering college, Perambalur.
- A semantic web services platform to support disaster management on 21/03/18 at Kings college of Engineering, Thanjavur.
- Energy efficient application for mobile Internet on 3/31/2016 at K. Ramakrishna College of Engineering, Trichy.

- Diversity based Internet access in Vehicular Networks on 3/24/2016 at Meenakshi Ramasamy Engineering College.
- Multiple Interfaces with Guaranteed Quality of experience on 3/11/2016 at Ranganathan Engineering college.
- Optimization of Efficient Energy in CSMA based Wireless Network- National Conference on Advances in Computing Communication and Security on 2nd April 2015 – published in Research Journal of Information Science and Technology(RJIST) ISSN 2348-1501 Vol-2 Special Issue APRIL 2015
- A New approach for Information Extraction Using JSON Database”, National Conference), RMK Engineering College 25 FEB 13.
- “Incremental Information Extraction Using JSON Database”, Maharaja Engineering College for women 1<sup>st</sup> and 2<sup>nd</sup> Feb 2013.
- “Improved Model To Mine Association Rules Of Customer Values”(National Level conference on Information Computing NIC’12) Shri Angallamman College of Engineering.
- “Sky Roof Automobile Automobile Detection And Controlling System” (National Conference on issues and trends in advanced computing NITAC-2010) 19<sup>th</sup> &20<sup>th</sup> March 2010. Bannariamman Institute of Technology.
- “RFEC in Mobile Ad-hoc Network”(Computing techniques and systems CTS 10) Muthayammal Engineering College Rasipuram 4<sup>th</sup> & 5<sup>th</sup> Feb 2010.
- Topology transparent scheduling in MANET” (National conference on current trends in Computer Science & Information Technology) Pavai Engineering College 27<sup>th</sup> & 28<sup>th</sup> 2009.
- “Defence against spoofed IP traffic using hop count filtering 1<sup>st</sup> March 2008.(National conference on innovation in Information Technology. INNOVA-2008) Saranathan college of Engineering.
- “Interactive Policy distribution in distributed firewall using key management system”. (National conference on Recent Computing techniques(NCRCT)) Jayaram College of Engineering.

### **Professional Affiliation**

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- Life member for Indian Society for Technical Education