

Faculty Profile

Dr. T Jemima Jebaseeli, M.Tech., Ph.D

Assistant Professor,

Department of Computer Science and Engineering

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Academic Background

| Degree | University | Year |
|----------|---|------|
| Ph.D | Karunya Institute of Technology and Sciences, Coimbatore | 2019 |
| M.Tech., | Manonmaniam Sundaranar University, Tirunelveli | 2011 |
| B.Tech., | Jayaraj Annapackiam CSI College of Engineering, Nazareth(Affiliated with Anna University) | 2006 |

Courses Taught

- ▶ Programming in C
- ▶ Programming in C++
- ▶ Java Programming
- ▶ Web Technology
- ▶ Software Engineering
- ▶ User Interface Design
- ▶ Object Oriented Analysis and Design
- ▶ Professional Ethics
- ▶ Ethics in Information Technology
- ▶ Object Oriented Software Engineering
- ▶ Computer Animation
- ▶ Computer Graphics
- ▶ Essentials of Information Technology
- ▶ Software Project Management
- ▶ Software Quality Management
- ▶ Total Quality Management
- ▶ Programming and Problem Solving

► User Interface and Experience Design

Research Interests

- Medical Image Processing
- Data Sciences
- Artificial Intelligence

Most recent Publications

- T. Jemima Jebaseeli, C. Anand Deva Durai, J. Dinesh Peter, IOT Based Sustainable Diabetic Retinopathy Diagnosis System, *Sustainable Computing: Informatics and Systems* 272, 2018. [Publisher: Elsevier, Impact Factor: 1.8, Article in Press, SCI Indexed]
- T. Jemima Jebaseeli, C. Anand Deva Durai, J. Dinesh Peter, Segmentation of Retinal blood Vessels from Ophthalmologic Diabetic Retinopathy Images, *Computers and Electrical Engineering* 73, 245–258, 2019. [Publisher: Elsevier, Impact Factor: 2.189, SCI Indexed]
- T. Jemima Jebaseeli, C. Anand Deva Durai, J. Dinesh Peter, Retinal blood vessel segmentation from diabetic retinopathy images using tandem PCNN model and deep learning based SVM, *Optik*, 199, 2019. [Publisher: Elsevier, Impact Factor: 1.914, SCI Indexed]
- T. Jemima Jebaseeli, C. Anand Deva Durai, J. Dinesh Peter, Retinal Blood Vessel Segmentation from Depigmented Diabetic Retinopathy Images, *IETE Journal of Research*, 2018. [Publisher: Taylor and Francis, Impact Factor: 0.826, Article in Press, SCI Indexed]
- T. Jemima Jebaseeli, C. Anand Deva Durai, J. Dinesh Peter, Extraction of Retinal Blood Vessels on Fundus Images by Kirsch's Template and Fuzzy C-Means, *Journal of Medical Physics* 44, 21-26, 2019. [Publisher: Medknow, ESCI Indexed]
- T. Jemima Jebaseeli, C. Anand Deva Durai, J. Dinesh Peter, Tensor flow-based recurrent neural network algorithm to diagnose diabetic retinopathy, *International Journal of Computer Aided Engineering and Technology*, 2019. [Publishers: Inderscience, Article in Press, SCI Indexed]
- T. Jemima Jebaseeli, C. Anand Deva Durai, Mechanism for diabetic retinal blood vessel profile measurement and analysis on fundus images, *Research Journal of Pharmacy and Technology*, 12(1), 1-6, 2019. [Publishers: A and V Publication, SCI Indexed]
- T. Jemima Jebaseeli, Rishabh, Venkatesan R, Technical irrigation system to predict soil moisture and water level in agricultural field, *International Journal of Innovative Technology and Exploring Engineering*, 8(6), 400-405, 2019. [SCI Indexed]
- Ramalakshmi K, Jemima Jebaseeli T, Venkatesan R, Anand Deva Durai C, Fuzzy based trust index calculation system for wireless sensor networks, *Advances in Mathematics: Scientific Journal*, 2020. [Scopus Indexed]
- Ramalakshmi K, T. Jemima Jebaseeli, and Venkatesan R, Prediction of Gender From Facial Image Using Deep Learning Techniques, *Journal of Mechanics of Continua and Mathematical Sciences*, Vol.15, No.2, pp 118-128, February 2020. [Web of Science Indexed]
- T. Jemima Jebaseeli, D Jasmine David, and R.Venkatesan, A Deep Tunneled Architecture For Creating Privacy-Aware Secured Email Communication, *International Journal of Advance Science and Technology*, Vol. 29, No. 10S, pp. 6717-6722, 2020. [SCI indexed, published and waiting for Scopus index]

- T. Jemima Jebaseeli, K.Ramalakshmi, R.Venkatesan, Safe Engineering Application for Analysis the Food Calorie Using Deep Learning, Journal of Green Engineering (JGE), Vol.10, Issue-5, May 2020. [Scopus indexed]
- T. Jemima Jebaseeli, Priya Dharsini, D Jasmine David, Novel Content Based Data Retrieval by Pattern Matching Scheme from Cloud Storage, Journal of Green Engineering (JGE), Volume-10, Issue-4, April 2020. [Scopus indexed]
- Jasmine David D, Jegathesan V, Jemima Jebaseeli T, Interference aware channel assignment in wireless mesh network, SSRG International Journal of Engineering Trends and Technology, 68(8), pp. 1-6, 2020. [Scopus indexed]
- Venkatesan R, Jemima Jebaseeli T, Ramalakshmi K, Prediction of water contamination detection using thermal image processing, International Journal of Advanced Trends in Computer Science and Engineering, 9(4), pp. 4278-4284, 16, 2020.[Scopus indexed]
- T. Jemima Jebaseeli, D. Sujitha Juliet, C. Anand Deva Durai, Segmentation of Retinal Blood Vessels using Pulse Coupled Neural Network to Delineate Diabetic Retinopathy”, Communications in Computer and Information Science 679, 268-285, 2016. [Publisher: Springer]
- T. Jemima Jebaseeli, C. Anand Deva Durai, J. Dinesh Peter, Segmentation of Type - II Diabetic Patient’s Retinal Blood Vessel to Diagnose Diabetic Retinopathy”, Lecture Notes in Computational Vision and Biomechanics 31, 268-286, 2018. [Publisher: Springer].
- Francis D, T. Jemima Jebaseeli, Fundus image vessel segmentation using PCNN model, Proceedings of 2016 Online International Conference on Green Engineering and Technologies, IC-GET 2016.
- Kumari J, Venkatesan R, Jemima Jebaseeli T, Salai Selvanayaki K, and Jeena Sarah T, A Comparison of Machine Learning Techniques for the Prediction of the Student’s Academic Performance, Lecture Notes on Data Engineering and Communications Technologies, 2020. [Publisher: Springer, Scopus Indexed]
- T. Jemima Jebaseeli, Venkatesan R, and Ramalakshmi K, Fraud detection for credit card transactions using random forest algorithm, Advances in Intelligent Systems and Computing, 1167, pp. 189-197, 2021. [Scopus indexed]

Projects Guided

- Image Processing
- Web Designing
- Android Applications

Memberships in Professional societies

NA

Significant achievements:

1. Received award for outstanding contribution in reviewing in Elsevier Journal: Computers and Electrical Engineering on April 2018.

2. The following article is listed as the top most 90 downloads in Computers and Electrical Engineering (Elsevier) Journal. "T. Jemima Jebaseeli, C. Anand Deva Durai, J. Dinesh Peter, Segmentation of Retinal blood Vessels from Ophthalmologic Diabetic Retinopathy Images, Computers and Electrical Engineering 73, 245–258, 2019. [Publisher: Elsevier, Impact Factor: 2.189]"
3. Received MatLab Central's file exchange badges awarded for First Submission, First Review, Personal Best Downloads Level-2, and 5-Star Galaxy Level-1 for the contribution in Mathworks on 9th Oct 2019.
MathWorks Profile : <https://www.mathworks.com/matlabcentral/profile/authors/9190810-jemima-jeba>
4. Deployed the project "Seesha Online Courses" for Seesha - Karunya Rural Community Hospital, Karunya Nagar, Coimbatore from Dec 2012 to May 2013 and received Rs.50,000/-.
5. Deployed the project "Automation of Bio-Technology Lab" for Department of Bio-Technology, Karunya University, Coimbatore from Dec 2013 to March 2014 and received Rs.5000/-.
6. Deployed the web portal for Central Library, Karunya University, Coimbatore from Sep 2013 to Feb 2014 and received Rs.5000/-.
7. Deployed the project "Mobile App for Karunya Land map with navigation system" for The Office of Director Trust, Karunya University, Coimbatore from August 2015 to Dec 2016 and received Rs.25,000/-.