| **FACULTY PROFILE FORMAT (Format 3)** | | |
| --- | --- | --- |
| **Staff Name** | : | P.Ezhilaasi |
| **Faculty ID** | : | TEC23 |
| **Designation** | : | Professor |
| **Qualification** | : | M.E., Ph.D |
| **Teaching Experience** | : | 28 years and 3 months |
| **Area of Specialization** | : | Signal and Image Processing, Embedded systems, IoT |
| **Subjects Handled** | : | Discrete Time Signal Processing  Microprocessors & Microcontrollers  Embedded Systems  Internet of Things  Electronic Circuits  Electronic Devices and Circuits  Principles of Communication  Communication Engineering  Radar Systems  Linear Integrated circuits  Digital Principles and system Design |
| **Books Published** | : | Image Processing in Biomedical Engineering |
| **Journals Published** | : | Revathi K.G, Shirly C.P, Sridhar S**, Ezhilarasi P,** “Brain Tumour Sub regions Segmentation using Death Wise Separable Convolution Neural Network with Dense U-Net”, Electromagnetic Biology and Medicine, Accepted for publishing.  V. L. Raja, A. M. Senthil Kumar, K. Shantha Kumari, R. Bharanidharan, P. Ezhilarasi, S. Rajeshkannan, T. M. Nithya, S. Venkatesh Kumar, "Analytical and Neural Network Analysis on Flux-Coated Aluminium Alloy by Activated TIG Welding with Synthesized Nanocomposites", Journal of Nanomaterials, vol. 2023, Article ID 3657314, 11 pages, 2023.<https://doi.org/10.1155/2023/3657314> ( Scopus)  K. K. Arun, S. Rajeshkannan **, P. Ezhilarasi** , L. Natrayan, “A preliminary study on the reactive suspension approach to create bioactive polymer nanocomposites for dental applications’, Digest Journal of Nanomaterials and Biostructures Vol. 17, No. 3, , p. 931 – 939, July - September 2022, DOI: 10.15251/DJNB.2022.173.931 **(SCIE)**  Brindha, G & **Ezhilarasi, P**, “ Topology Driven Cooperative Self Scheduling for Improved Lifetime Maximization in WSN”, Computer System Science Engineering, Vol 45 issue no. 1, pp 445-458; 2022 ,<https://doi.org/10.32604/csse.2023.027329> **(SCIE)**  G.Brindha , P. Sudha Juliet , **P.Ezhilarasi** and Dr.T.Sasilatha , “An Advanced Optimized Transmission Technique for Parameter Estimation in WSNS”, Solid State Technology, Volume: 64Issue: 2, 2021  S Rajeshkannan. J.Sivakumar, **P.Ezhilarasi**, “ Automatic detection of COVID-19 in chest radiographs using serially concatenated deep and handcrafted features, Journal of X-ray Science and technology, vol. 30, no. 2, pp. 231-244, 2022, DOI : 10:3233/XST-211050 **(SCIE)**  Brindha, G & **Ezhilarasi, P**, ‘Energy Efficient Momento Based Dynamic Scheduling for Lifetime Maximization in WSN’, Journal of Ambient Intelligence and Humanized Computing (ISSN 1868-5137), Vol.12, No. 6 Page No;5865-5875, June 2020 DOI: 10.1007/s12652-020-02131-7. (**SCIE) ( Impact factor 7.104) , ( H Index 28)**  T.Sasilatha, Karthickmanoj.R, K.Balamurugan, **P.Ezhilarasi**, S.Arun, “"Role of Compressed Sensing based Image Sensor for Smart Surveillance Applications", TEST Engineering and Management (ISSN: 0193-4120), Volume-82, PP No. 1982 - 1985 publication issue: January -February 2020, January 2020 .(**Scopus indexed**) **( H Index 5)**  T.Sasilatha, M.Parameswari, **P.Ezhilarasi**, Balaji, S.Arun, "Valuable Vitality Remote Perceiving in Cloud IOT", TEST Engineering and Management (ISSN: 0193-4120), Volume-82, PP No. 1986 - 1992 publication issue: January -February 2020, January 2020 (**Scopus indexed**) **(H Index 5).**  **P. Ezhilarasi**, S. Rajeshkannan, Kovendan. A K P, T. Sasilatha, K. R. Kayalvizhi, “Damaged Number Plate Recognition”, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9, Issue-1S2, pp 22-25, December 2019. (DOI: 10.35940/ijeat.A1018.1291S219) (**Scopus indexed**) **(B Impact factor 5.97).**  **Ezhilarasi.P,** Rajeshkannan S, &Gokulaprasath P**, “**Smart Health Monitoring System”, Journal of Computational and Theoretical Nanoscience, Vol 17, Number 5 pp 2261-2265 (5), May 2020. (**DOI:** https://doi.org/10.1166/jctn.2020.8881 ) (**Scopus indexed**).  . **Ezhilarasi, P** & Nirmalkumar, P, ‘Algorithmic based VLSI architecture of Integrated Image Compression for CMOS Image Sensor’, National Academy Science Letters-India (Springer) , vol.38, no.1, pp**.**49-59 **, Feb** 2015 .(**SCIE**, ISSN: 0250-541X**,** Impact factor : 0.788)  **Ezhilarasi, P** & Nirmalkumar, P, ‘A combined approach for lossless image compression technique using curvelet transform’, International Journal of Engineering and Technology, vol.6, no.3, pp.1487-1494,2014 (**Scopus indexed ,**ISSN : 0975-4024).  . **Ezhilarasi, P** & Nirmalkumar, P, ‘Efficient Image Compression Algorithm using Modified IWT and SPIHT for CMOS Image Sensor’, International Review on Computers and Softwares, vol.8, Issue no.9, pp.2044-2050, 2013 (**Scopus indexed, I**SSN : 1828-6003).  . **Ezhilarasi, P** & Nirmalkumar, P, ‘An Efficient Image Compression by Overlapped Discrete Cosine Transform with Adaptive Thinning’, International Journal of Engineering Research and Applications, vol.8, no.5, pp.1675-1681, 2012 (ISSN : 2248-9622)  . Rajeshkannan S, **Ezhilarasi P,** et.al**,** “ Efficient Cloud based Automated Brain Segmentation using 3D Printing Application”, Stochastic Modeling & Applications, vol.26, no.3, pp . 1185-1198, January- June 2022, Issn : 0972-3641.  Abishk.R, Rajeshkannan S, **Ezhilarasi P,** et.al“ Smart Health Integrated Screening System using smart mirror”, Stochastic Modeling & Applications, vol.26, no.3, pp . 1199-1208, January- June 2022, Issn : 0972-3641. |
| **Conference /Workshop Attended** | : | **Conference Publications**  Pearline, **Ezhilarasi P**, “Enhanced Marker-Controlled Watershed Segmentation Algorithm for Brain Tumor Segmentation”, Communications in Computer and Information Science, Springer [Communications in Computer and Information Science](https://link.springer.com/bookseries/7899) book series , CCIS,volume 1579, pp. 154–166, July 2022, DOI:<https://doi.org/10.1007/978-3-031-10766-5_12> (Scopus)  Shruthi S, Priya dharshini, Ranjith Raj B, Vaddi Lakshmi Satya S Sai Sarojini**Ezhilarasi P** Rajesh Kannan S “Anxiety Controlling Wrist Band” Advances in Parallel computing, IOS Publisher, Vol. 38, PP. 145- 154, 2021 (Scopus)  G. Shahana **P. Ezhilarasi**, S. Rajeshkannan, “Adaptive Neuro Fuzzy Data Aggregation Model for Developing and Planning for Aquaculture Farming Practices," *2023 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI)*, Chennai, India, 2023, pp. 1-8, doi: 10.1109/ACCAI58221.2023.10200854. **(Scopus)**  Sekhar J.C., **Ezhilarasi P**, Bordoloi. D, Sisodia. S, Shobana. A, “Access Control in E- Health Records Employing Mobile Cloud Computing Model and Big Data Analytics”, 6th International Conference on Inventive Computation Technologies, ICICT 2023**(IEEE)**- Lalitpur, Nepal, 2023, pp. 1058-1064, doi: 10.1109/ICICT57646.2023.10134187. **(Scopus)**  Rajesh Kannan S; **Ezhilarasi P**; Rajagopalan VG; Sushanth Krishna mithran; Ramakrishnan H; Harish Kumar Balaji "Integrated AI Based Smart Wearable Assistive Device for Visually and Hearing-Impaired People," *2023 International Conference on Recent Trends in Electronics and Communication (ICRTEC)*, Mysore, India, 2023 pp. 1-6, doi: 10.1109/ICRTEC56977.2023.10111863. **(Scopus)co**  **G.Shahana P. Ezhilarasi**, S. Rajeshkannan, “ Comparison of Mamdani and Sugeno fuzzy based data aggregation models for developing smart aquaculture system”, second International Conference on Innovative Computing, Intelligent Communication and Smart Electrical systems (ICSES -2022), ICSES 393, 2022  K R Kayalvizhi, Kovendan. AKP, **P. Ezhilarasi**, S. Rajesh Kannan, “A novel methodology enabling underwater LI-FI communication for sea divers” AICTE sponsored national conference on recent advances in on–board ship automation, 26th and 27th September 2019  Brindha.G, **Ezhilarasi.P**, “Enhanced Sink Relocation with Ant Colony Optimization “, International conference on Innovations in Engineering, Technology & Management ,pp 10-22, 18 May 2019.  Brindha.G, **Ezhilarasi.P** & Thanigaivelu, **‘**Transmission Range Adjustment for Enhancing Network Lifetime for WSN, IEEE International Conference on Computer, Communication and Signal Processing, ICCCSP’2018, (*IEEE digital library*), pp. 170-175, February 2018.  Brindha.G, **Ezhilarasi.P**, “Transmission Distance and Transmission Range based Unequal Clustering Protocol to prolong the Network Lifetime in WSNs”,International conference on Innovations and Research in Marine Electrical and Electronics Engineering (ICIRMEEE) 2018  . Geetha. B & **Ezhilarasi.P, ‘**An Efficient Skin Segmenta tion AlgorithmFor CriminalIdentification Using Vein Patterns’, International Conference on Electrical, Electronics, Instrumentation and Computer Communication, pp 309-313, January 2018.  **Ezhilarasi, P** & Nirmalkumar, P , ‘An Efficient Image Compression by Improved DCT with Adaptive Thinning’, International Conference on Research and Development Prospectus on Engineering and technology, ICRDPET’12, pp. 898-902, 2013.  **Ezhilarasi, P** & Nirmalkumar, P, ‘An Enhanced Anti Artifacts Compressive Approach for CMOS Image Sensor’, International Conference on communication and signal processing, ICCSP’13, pp. 1037-1041, 2013.  **Ezhilarasi, P** & Nirmalkumar, P, ‘Integrated Image Compression by Predictive Boundary Adaptation with QTD and Adaptive Thinning’, Advances in computer and communication technology IETE conference, Bombay, pp.53-58, 2012.  **Workshop/ Conference Attended**   * National Level Workshop on VLSI & Embedded Systems. SRM University. Kattankulathur,T.N. * Conference : International Conference on Wireless Communication Networks , SSNCE, Chennai * FDP : Re- Engineering Teaching Skills, CEG, Anna University, Chennai * Workshop : VLSI & Embedded System Tool, CEG, Anna University, Chennai * Workshop: Research Methodologies , Anna University, Trichy |
| **Patent Details** | : | * Cost-Effective Multi-Purpose AI Based Drone Using Smartphone * Design A Low-Cost Green Power Divining Farming Using IoT and Cloud Computing * Development of Next Generation Eco Air Purifier Device with Intelligent Air Quality Monitoring and Disruptive Module * Smart Mobile PhoneDeposit Machine usingIoT& ArtificialIntelligenceTechniques. * A Servo Amplifier Control Device |
| **Funded Project Details** |  | Micro Level Power Management System- MIC-IIC Product Development Grant  Electric Shock PreventionSystem- MSME Idea Development Grant-MyGov  Mealshare- MSME Idea Development Grant-MyGov |