Faculty Profile



Dr. S.Sivanandam, M.E., Ph.D Professor

HIGHLIGHTS:

- Number of Journal Publications: 10
- H-Index: 4
- Project Funding Received: Nil
- Patents Published: 1
- Patents Granted: Nil

PROFESSIONAL LINKS:

- Scopus ID: 54788253100
- Scopus Link: <u>https://www.scopus.com/authid/detail.uri?authorId=54788253100</u>
- Google Scholar ID: AP3AeysAAAAJ
- Anna University Faculty ID: 264755
- AICTE Faculty ID: 1-3562744261
- Anna University Supervisor ID: Yet to obtain
- LinkedIn: https://www.linkedin.com/in/sivanandam-s-39647974/

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 18 Years
- Industrial Experience: 1 Year

INTERNATIONAL EXPOSURE: Nil

AREA OF SPECIALIZATION:

- Medical Thermography
- Alternative Medicine
- Medical Instrumentation

Ph.Ds AWARDED WITH DETAILS: NA

Ph.Ds GUIDING: NA

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

• ICSSR (Ref No: ICSSR-RMM-2024-1056)

PATENTS PUBLISHED/GRANTED:

• A patent titled "System and methods for cerebral stroke detection" was published by the Indian Patent Office on 17/03/2023. [Application reference number: 202341010360] Journal number: 11/2023.

COURSES CERTIFIED:

- Entrepreneurship Development
- Effective Patent Drafting conducted jointly by Centre for Intellectual Property Rights (CIPR), Anna University, Chennai and Tamilnadu Technology Development and Promotion Centre (TNTDPC) of Confederation of Indian Industry (CII), Chennai, 9th-13th November, 2016.
- Total Quality Management (TQM) for Teachers
- Drug Delivery: Principles and Design
- Diabetes: Diagnosis, Treatment and Opportunities, offered by University of California, San Francisco

ACHIEVEMENTS AND AWARDS:

Recipient of Gandhian Young Technological Innovation (GYTI) award for the work titled "Prognosis of pre-diabetes and type 2 diabetes based on the non-invasive estimation of blood glucose using infrared thermography against the bio-marker" awarded by Dr. R.A Mashelkar (Chairman, National Innovation Foundation) at IIM-Ahmedabad, 25th of March, 2013.
(http://gyti.techpedia.in/project-detail/prognosis-of-the-pre-diabetes-and-type-2-diabetes-based/910)

SPECIAL SESSIONS DELIVERED:

• Presented a guest lecture on "Diagnosis of the type 2 Diabetes based on the non-contact infrared thermography

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- S. Sivanandam, A. A. Ajees, B. Kamesh and W. K. Samraj, "Supportive System for Hemiplegic Patients with Health Monitoring Capabilities," *2023 9th International Conference on Smart Structures and Systems (ICSSS)*, CHENNAI, India, 2023, pp. 1-4, doi: 10.1109/ICSSS58085.2023.10407372.
- S. Sivanandam, M. Malathi, T. G. H. Ramyaa, A. Judi Rebecca, R. Kannan and M. Jagadeesan, "Screening of type II diabetes mellitus based on non-contact infrared temperature sensor," 2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT), Delhi, India, 2023, pp. 1-7, doi: 10.1109/ICCCNT56998.2023.10306921.
- S. Sivanandam, D. G. Gideon, S. Saran and A. Jothieshwaran, "Design And Development of Cerebral Stroke Prediction System," 2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT), Delhi, India, 2023, pp. 1-5, doi: 10.1109/ICCCNT56998.2023.10308293.

- **S.Sivanandam** and B.Varshini, Detection of Malarial parasite using deep learning, National conference on Signal processing, Communication and Networking (NCSPCN-2023) at Sri Venkateswara College of Engineering, Tamilnadu, 09th May 2023.
- Jayaprakash G, Tejaswini P, Chandrasekhar M, Ramya C, Gangadhar Reddy K, Sivanandam S, Fingerprint biometric and GPS enabled travel fare deduction system for Indian railways, 2nd International Conference on Contemporary Engineering and Technology at Potti SriRamulu Chalavadi Mallikarjuna Rao College of Engineering and Technology, Vijayawada, 2nd - 3rd April, 2018.
- Aparna B, Anithakrithi B, Naveena P, Yaswanth Kumar M, Avinash M, Sivanandam S, Design and Simulation of Bionic glove for Rehabilitation of the Paralytics, National Conference on Recent Trends in Biomedical Engineering, NCRTBME at SRM University, Chennai, 23rd – 24th August, 2017.
- Lekshmy A, **Sivanandam S**, "Diagnosis of thyroid disorder using infrared thermography", International conference on Electronics, Communication and Aerospace technology (ICECE 2017) at RVS Technical Campus, Coimbatore, 20th-22nd April, 2017.
- Sivanandam S, Anushree, Sruthartha S, Lashya K, Anithakrithi B, Naveena P, "Infrared Thermometer: A surrogate tool for the undiagnosed diabetes in comparison with the Indian diabetes risk score", International Conference on Recent Trends in Computing and Information technology (ICRTCIT), 27th-31st March, 2017, Chennai.
- Subitcha J and Sivanandam S, Validation of the truly non-invasive blood glucose estimation based on the infrared thermography using Clarke error grid analysis, 9th National Conference NCMTA, 27th-28th January, 2017.
- Aishwarya Nair, **Sivanandam S**, "Non-invasive detection of Atherosclerosis based on the infrared thermal imaging", IEEE sponsored 3rd International conference on Electronics and Communication systems, 25th-26th February, 2016, Coimbatore, Tamilnadu.
- Madhanraj M, Sivanandam S, "Validation of non-invasively estimated glycated haemoglobin against biochemical method", International conference on Emerging trends in Engineering and Technology, 3rd May, 2015, Chennai, Tamilnadu.
- CH.Sandeep Kumar Subudhi and **S. Sivanandam**, Intelligent wireless patient monitoring and tracking system, International conference on Advance research in engineering and technology, April, 2014, Chennai, Tamilnadu.
- Participated in the 1st Qirt-Asia International conference on Quantitative Infrared Thermography (QIRT-2015), 7th-10th July, 2015, Mamallapuram, Tamilnadu.

- S.Sivanandam, M.Anburajan, B.Venkatraman, M.Menaka, D.Sharath, "Infrared Thermography: A non-invasive tool for the diagnosis of type 2 diabetes against the standard bio-marker", 5th World Congress of Diabetes India, 18th – 21st April, 2013, Kochi, Kerala.
- S.Sivanandam, M.Anburajan, B.Venkatraman, "Assessment of infrared thermogram in age-sex matched South Indian population for diagnosis of type 2 diabetes", "International Conference on Global Innovations in Technology and Sciences, 4th – 6th April, 2013",Kottayam, Kerala.
- Reguram A and **Sivanandam S**, "Computational fluid dynamic analysis of left subclavian artery", National Conference on "advanced trends in healthcare engineering", 27th February, 2013, Dhanalakshmi Srinivasan College of Engineering, Tamil Nadu.
- Ebenezer Lartey Debrah, **S.Sivanandam**, "Monitoring of vital physiological parameters for athletes" National Conference on "Trends in Electronics, Instrumentation, Embedded System & Automation" March 30th, 2012.
- Michael Oppong Jeboah, S.Sivanandam, "Design and construction of wearable upper limb movement assistive device for kinesiotherapy treatment" International conference on "computing techniques, embedded systems and drives (ICCED '12) during 7th - 9th March, 2012, India.
- M.Anburajan, S.Sivanandam, S.Bidyarasmi, B.Venkatraman, M.Menaka, Baldev Raj, "Changes of Skin Temperature of Parts of the Body and Serum Asymmetric Dimethylarginine (ADMA) in Type 2 Diabetes Mellitus Indian Patients", IEEE 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'2011), August 30 to September 3, 2011, USA.

WORKSHOP/FDP:

- Participated in the DST sponsored 2 week "Faculty Entrepreneurship Development Programme" at KIT-Kalaignarkarunanidhi Institute of Technology, Coimbatore, 09th-21st December, 2024.
- Participated in the ATAL FDP on "Entrepreneurship Development" conducted by Central University of Jammu, 02nd to 07th December, 2024.
- Participated in the Professional Development Programme on Emerging Trends in Additive Manufacturing" at NITTTR, Chennai, 24th-28th June, 2024.
- Attended "Online workshop on Data Analytics and AI" organized by Centre for Computer Science and Information Technology, Manjeri, University of Calicut, in association with ipsr solutions on 15th June, 2024.
- Organized a Student's Industrial Visit at IGCAR, Kalpakkam. 10th May, 2024.
- Participated in the International Workshop on "Emerging Technologies and Challenges for Exoskeleton" (IND-EXOS 2024), DEBEL, DRDO, Bengaluru, 16th 17th April 2024.

- Participated in the Pre-conference workshop on "Reinventing Rehab" organized by the Department of Biomedical Engineering at SSN College of Engineering, Chennai, 17th-18th March, 2024
- Participated in the Faculty Development Program on "Medical Device Regulatory Affairs", conducted by B.V. Raju Institute of Technology, 12th-16th February, 2024.
- Participated in the Workshop on 3D Bio-printing conducted by Cellink and IISC, Bengaluru, 30th & 31st May, 2023.
- Participated in the Faculty Development Program on "Radiological Equipments", conducted by Hindusthan College of Engineering and Technology, 8th-12th May, 2023.
- Participated in the workshop on "Ideation and Proposal Writing workshop organized by PALS and Rural Technology Action group, IIT Madras, 2nd and 3rd March, 2022.
- Certified Innovation Ambassador (Foundation Level) of MHRD Institution Innovation Council, 7th -13th July, 2022.
- Participated in the "Student Induction Program based on Universal Human Values (SI-UHV)" conducted by AICTE, from 12th 16th July, 2021.
- Participated in the two weeks short term course on "Design Thinking for Innovation in Higher Education", conducted by the Saveetha Engineering College, from 21st June to 3rd July, 2021.
- Participated in the FDP on "System design for health care and assistive technologies", conducted by SSN College of Engineering, 14th to 18th June, 2021.
- Participated in the International School on Sensors for Body area networks conducted by Chemnitz University of Technology, Germany (online), 31st May to 04th June, 2021.
- Participated in the FDP on "World Education Summit 2021: Beyond Pandemic" conducted by the Aarupadai Veedu Institute of Technology, during 7th 13th June, 2021.
- Participated in the ATAL FDP on "Flexible and Wearable Antennas: Recent Advancements, Fabrication Techniques and Applications" conducted by the Department of ECE, NITTTR, Chandigarh, during 12th to 16th October, 2020.
- Participated in the ATAL FDP on "Precision Health Technology" conducted by the Department of ECE, Coimbatore Institute of Technology, Coimbatore, 21st to 25th September, 2020.
- Participated in the FDP on "Data Science" conducted by Andhra Pradesh State Skill Development Corporation (APSSDC), 1st to 30th of June, 2020.
- Participated in the "Quiz on Digital Electronics" conducted by the Department of ECE, GMR Institute of Technology on 12th of June, 2020 and secured 96%.

- Participated in the National Level online Faculty Development Program on "Artificial Intelligence and Machine Learning" conducted by VEMU Institute of Technology, Chittoor, 25th to 29th May, 2020.
- Participated in ISTE sponsored National Seminar on Task and Strategy of Introducing Skill Based Higher Education in Technical Institutes of India, at Siddharth Institute of Engineering and Technology, Puttur, Andhra Pradesh, 18th March, 2019.
- Participated in the conference on "Industry 4.0" organized by the Confederation of Indian Industry (CII) by partnering with Andhra Pradesh State Skill Development Corporation (APSSDC), Texas A&M University and IIT-Tirupati, 17th to 18th December, 2018.
- Participated in workshop on Introduction to Robotics at Sri Venkateswara College of Engineering, Tirupati, 28th to 29th June, 2018.
- Attended the Faculty Development Program on "Embedded systems and IoT Applications" at Siddartha Institute of Science and Technology, Puttur, 9th – 14th December, 2017.
- Participated as Mentor in the 1st AICTE-ECI Chhatra Vishwakarma Awards 2017 at All India Council for Technical Education (AICTE) HQ, New Delhi, 19th September, 2017.
- Participated in a certificate course on Effective Patent Drafting conducted jointly by Centre for Intellectual Property Rights (CIPR), Anna University, Chennai and Tamilnadu Technology Development and Promotion Centre (TNTDPC) of Confederation of Indian Industry (CII), Chennai, 9th-13th November, 2016.
- ISTE-SRM sponsored Short Term Training Program on "Soft Computing Techniques for Clinical Decision Making", PSNA College of Engineering, Dindigul, Tamil Nadu, 7th-14th July, 2014. Presented a guest lecture on "Diagnosis of the type 2 Diabetes based on the non-contact infrared thermography".
- Diabetes: Diagnosis, Treatment and Opportunities, offered by University of California, San Francisco (Online Course Completion)
- Undergone, one month summer training on Biomedical Instruments at DEBEL, DRDO, Bangalore, 2007.

PROFESSIONAL MEMBERSHIPS:

- Indian Society for Technical Education (ISTE) Life Member [LM 68896]
- Force Biomedical Membership [FB-M-001064]
- Member: Publications Committee at Kalam Institute of Higher Technology (KIHT), AMTZ, Visakhapatnam, Andhra Pradesh.