



Dr. SUDHAKAR SENGAN, M.E., Ph.D., PDF (Taiwan)

Dr. Sudhakar Sengan is a Professor & Director of International Relations in the Department of Computer Science and Engineering at Erode Sengunthar Engineering College, Tamil Nadu, India. He received his Ph.D. in Information and Communication Engineering from Anna University, Chennai, India, in 2014, following an M.E. in Computer Science and Engineering from Anna University. He has approximately two decades of academic, research, and supervisory experience.

He has an extensive research portfolio comprising **300 scholarly contributions**, including approximately **261 research articles, 17 patents, and 3 textbooks**. His CV reports **100 SCI-indexed publications and 127 Scopus/Web of Science-indexed publications**, with a Google Scholar h-index of **45** and more than **5,800 citations**. He has been recognized among the world's Top 2% Scientists since 2021 and is a Senior Member of IEEE.

He is a recognized Research Supervisor of Anna University in the Faculty of Information and Communication Engineering. His research spans **artificial intelligence, machine learning and deep learning, IoT, network and information security, wireless and mobile networks, cloud computing, intelligent healthcare systems, smart grids, and emerging computational technologies**. His research portfolio demonstrates interdisciplinary applications of intelligent computing across cybersecurity, healthcare, energy, transportation, environmental systems, and communication networks.

He has established an extensive international research profile through postdoctoral and collaborative research engagements. He completed postdoctoral research in the Department of Electronic Engineering at the National Kaohsiung University of Science and Technology (NKUST), Taiwan, and has undertaken additional postdoctoral research engagements with

institutions in Brazil, India, Malaysia, and Taiwan. He also serves as a Visiting Researcher at NKUST, Taiwan.

His scholarly contributions encompass a substantial body of peer-reviewed research, patents, textbooks, and conference publications. His work has appeared in internationally recognized journals including *Scientific Reports*, *IEEE Access*, *Digital Communications and Networks*, *Computers & Electrical Engineering*, *Environmental Pollution*, *Robotics and Autonomous Systems*, *Big Data Research*, and *Sustainable Energy Technologies and Assessments*. His recent research particularly emphasizes federated learning, AI-enabled cybersecurity, IoT/IoMT security, multimodal deep learning, intelligent healthcare, renewable-energy systems, and smart-grid technologies.

He is also actively involved in research capacity building and academic mentorship. He has supervised doctoral research in information and communication engineering and has guided a substantial number of undergraduate and postgraduate research projects. His academic contributions extend to editorial and professional service, including appointments as an Editor-in-Chief and as a program committee member for international conferences.

In addition to his academic research, he has contributed to innovation and intellectual property development through international and Indian patents addressing IoT-enabled healthcare, cloud security, intelligent transportation, renewable-energy systems, wireless technologies, and related engineering applications. He has also authored textbooks in **Operating Systems**, **Digital Principles and System Design**, and **Problem Solving and Python Programming**.

His current research vision centers on developing **secure, explainable, privacy-preserving, and sustainable AI-driven intelligent systems** by integrating artificial intelligence, deep learning, federated learning, IoT, cybersecurity, and next-generation computing technologies for real-world societal and engineering applications.